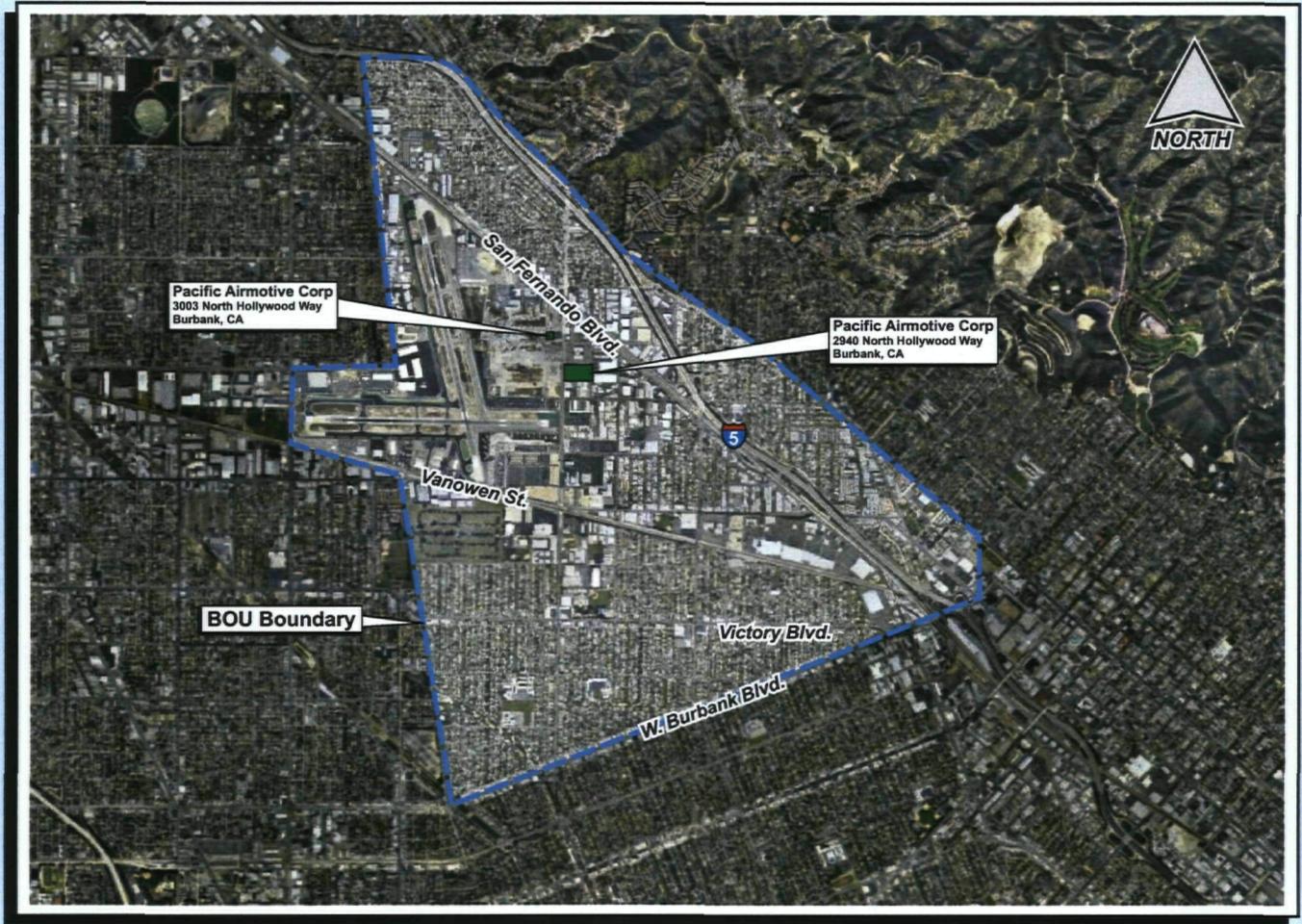


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FINAL GROUNDWATER MONITORING REPORT FOURTH QUARTER 2006 PACIFIC AIRMOTIVE CORPORATION 2940 AND 3003 NORTH HOLLYWOOD WAY BURBANK, CALIFORNIA



Prepared for:



Prepared by:



Tetra Tech, Inc.
3475 E. Foothill Blvd.
Pasadena, California
TC# 17653-0604 / February 2007



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February 16, 2007

Ms. Rachel Loftin
Remedial Project Manager
US. EPA, Pacific Southwest Region - 9th Floor
Superfund Division, SFD-7-4
75 Hawthorne Street
San Francisco, CA 94105

Dear Rachel:

Enclosed please find one (1) copy of the Groundwater Monitoring Report, Fourth Quarter 2006, Pacific Airmotive Corporation, 2940 and 3003 North Hollywood Way, Burbank, California. With this quarterly event we have completed the 4 quarters of monitoring requested by EPA in your 20 October 2005 letter. Based on a review of the data, there do not appear to be any significant trends in concentrations of the chemicals of concern. Should EPA request additional sampling, we will be happy to discuss continuing the sampling efforts on selected wells for specific chemicals of concern as part of the EPA-approved Burbank Operable Unit groundwater monitoring program. Please do not hesitate to contact me if you have any questions or comments.

Regards,

A handwritten signature in black ink, appearing to read 'Lisa A. Hamilton'.

Lisa A. Hamilton
Manager, MidAtlantic/Southeast/Western Regions

cc Linda Gertler, LMC (w/out enclosure)
Ken Martins, CH2M Hill (with enclosure)
Dixon Oriola, LARWQCB (with enclosure)
Alex Lapostol, E2 (with enclosure)
Susanne Herald, GE (w/out enclosure)

**FINAL
GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2006
PACIFIC AIRMOTIVE CORPORATION
2940 AND 3003 NORTH HOLLYWOOD WAY
BURBANK, CALIFORNIA**

February 2007

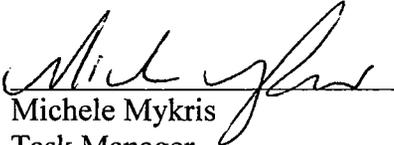
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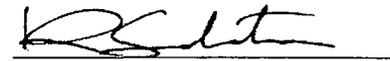
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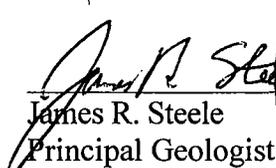
Lockheed Martin Corporation
Corporate Energy, Environmental Safety and Health
Burbank, CA

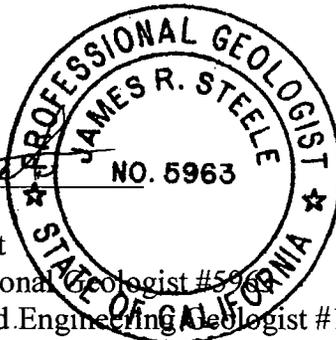
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TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
1.1 Site Location and Description.....	1
1.2 Objective.....	3
1.3 Report Organization.....	3
2.0 SUBSURFACE CONDITIONS	4
2.1 Geology.....	4
2.2 Hydrogeology	4
3.0 DESCRIPTION OF HISTORICAL AREAS OF CONCERN	6
4.0 GROUNDWATER MONITORING PROCEDURES	9
4.1 Groundwater Level Measurements	9
4.2 Well Purging and Sampling	11
4.3 Laboratory Analysis.....	12
5.0 GROUNDWATER ANALYTICAL RESULTS	13
5.1 Data Verification and Validation.....	13
5.2 VOC Analytical Results.....	15
5.3 Emergent Chemicals Analytical Results.....	18
5.4 Dissolved Iron and Manganese Analytical Results	19
5.5 Inorganic Analytical Results.....	20
5.6 Cation Analytical Results	21
5.7 Title 22 Metals Analytical Results.....	22
6.0 REFERENCES	26

List of Tables

Table 3-1	Historical Analysis From 1987 to 1989	8
Table 3-2	Historical Analysis From 1992 to 1995	8
Table 4-1	Summary Groundwater Elevations	9
Table 5-1	Summary of Detected VOCs Analytical Results, EPA Method 8260B	18
Table 5-2	Emergent Chemicals Analytical Results.....	19
Table 5-3	Inorganics Analytical Results	21
Table 5-4	Cations Analytical Results, EPA Method 6010B	22
Table 5-5	Title 22 Metals Analytical Results, EPA Method 6010B/7470A.....	25

List of Figures

Figure 1-1	BOU Boundary Map	2
Figure 3-1	PAC Well Location Map	7
Figure 4-1	Fourth Quarter 2006 WT HSUs Groundwater Elevation, PAC.....	10

List of Appendices

Appendix A	Field Data Log Sheets
Appendix B	Laboratory Analytical Data Reports
Appendix C	Quality Assurance/Quality Control Summary

1.0 INTRODUCTION

On behalf of Lockheed Martin Corporation (LMC), Tetra Tech, Inc. (Tetra Tech) has prepared this groundwater monitoring report for two Pacific Airmotive Corporation (PAC) properties within the Burbank Operable Unit (BOU) in Burbank, California (Figure 1-1). LMC is performing work requested by the U.S. Environmental Protection Agency (EPA) in a letter directed to General Electric (GE) and dated October 20, 2005, due to a settlement agreement between PAC, an indirect wholly-owned subsidiary of GE, and LMC.

In the October 20, 2005, letter, EPA requested GE to initiate four quarters of groundwater sampling of the eight (8) existing wells at the PAC properties based on previous facility operations, detection of constituents, lack of current groundwater results, and recent regulatory concerns related to potential sources associated with emergent chemicals within the BOU. The EPA required analysis of the groundwater for volatile organic compounds (VOCs), 1,2,3-trichloropropane (1,2,3-TCP), Title 22 metals, including thallium and dissolved (total) chromium, hexavalent chromium, 1,4-dioxane, N-nitrosodimethylamine (NDMA), perchlorate, nitrate/nitrite, common cations and anions, dissolved oxygen, sulfide, and dissolved iron and manganese.

1.1 SITE LOCATION AND DESCRIPTION

The PAC properties are located at 2940 and 3003 North Hollywood Way within the north-central portion of the BOU (Figure 1-1). The property at 2940 North Hollywood Way was identified as the Main Facility, and the property at 3003 North Hollywood Way was identified as the Jet Engine Test Cell Facility. Both facilities were historically associated with the manufacturing, design, and repair of aircraft and aircraft engines. Structures on 2940 North Hollywood Way have been demolished and the property has been sold. Structures on 3003 North Hollywood Way are currently vacant.

This report presents the results for the last required quarter of sampling as required by the EPA letter.



Figure 1-1 BOU Boundary Map

1.2 OBJECTIVE

The purpose of this groundwater monitoring report is to comply with the provisions of the EPA October 20, 2005, letter. The objective of this monitoring report is to present groundwater data collected during the fourth quarter of 2006. The groundwater data are being collected to assist EPA in assessing the current groundwater quality and conditions at the above mentioned monitoring wells and within the BOU. The quarterly monitoring report presents field data, laboratory analytical results, and quality control data collected during groundwater level and water quality monitoring.

1.3 REPORT ORGANIZATION

The fourth quarter 2006 quarterly groundwater monitoring report has been organized into the following six (6) sections:

- Section 1. Introduction: introduces the project and presents the objectives and report format.
- Section 2. Subsurface Conditions: presents the site geologic and hydrogeologic setting.
- Section 3. Description of Historical Areas of Concern: identifies the areas of groundwater concern beneath the PAC properties.
- Section 4. Groundwater Monitoring Procedures: summarizes the groundwater monitoring activities, groundwater measurements, and laboratory analysis conducted.
- Section 5. Groundwater Analytical Results: discusses groundwater monitoring results.
- Section 6. References: lists the references used to prepare this quarterly groundwater monitoring report.

2.0 SUBSURFACE CONDITIONS

2.1 GEOLOGY

The PAC properties are located in the southeastern portion of the San Fernando Valley (SFV) between the Santa Monica and Verdugo mountains. The SFV is located on the northwestern block of the Los Angeles Basin within the Transverse Ranges Geomorphic Province, an east-west trending unit composed of subparallel ranges separated by alluviated, synclinal valleys and prominent faults. The SFV is bordered to the north by the Santa Susana and San Gabriel mountains, to the east by the Verdugo Mountains, to the south by the Santa Monica Mountains, and to the west by the Simi Hills. These uplands are composed of crystalline bedrock of Precambrian to Mesozoic in age and sedimentary units from Cretaceous to Pleistocene in age. The crystalline bedrock and sedimentary units were eroded from the uplands during the Quaternary Period and deposited as more than 2,000 feet of alluvium in the SFV. The only major structural feature near the PAC properties is the Verdugo Fault, which is approximately 1 mile to the northeast and trends northwesterly along the base of the Verdugo Mountains (Tetra Tech, 2006).

2.2 HYDROGEOLOGY

The PAC properties are located within the San Fernando Basin (SFB), one (1) of four (4) distinct groundwater basins that encompass the entire watershed of the Los Angeles River and its tributaries within the SFV (also known as the Upper Los Angeles River Area, or ULARA). Groundwater within the eastern portion of the SFB flows mainly through two sedimentary units: 1) Older Alluvium of Pleistocene age and 2) Younger Alluvium of Holocene age. The Older Alluvium is composed of sand, gravel, and boulders in the northwestern portion of the BOU and interbedded silt and sand in the eastern and southern portions of the BOU. The Younger Alluvium is composed of coarse sand, gravel, and cobbles interbedded with finer-grained units of sand, silty sand, sandy silt, silty clay, and minor gravelly sand. Groundwater flow within the Older Alluvium has been observed to be locally semi-confined to confined. The Younger Alluvium is

generally unconfined to semi-confined, depending upon the location and thickness of fine-grained interbeds (Tetra Tech, 2006).

The aquifer in the Younger Alluvium within the BOU has been divided into five hydrostratigraphic units (HSU) based on electrical resistivity responses in geophysical logs (Hargis & Associates, 1991; Simon Hydro-Search, 1993). The five HSUs of the Younger Alluvium are identified, from upper to lower, as A', X, A, Y, and B. The A', A, and B units are generally composed of coarser-grained material (coarse sands, gravels, and cobbles). The X and Y HSUs separate the other three HSUs listed above (A', A, B) and consist of relatively finer-grained material including sand, silty sand, and silt. Based on the stratigraphic position of the units and the groundwater gradient, the A', X, or A HSU may locally represent water table conditions, depending on geographic location within the project area.

3.0 DESCRIPTION OF HISTORICAL AREAS OF CONCERN

After reporting a jet fuel spill to the Los Angeles Regional Water Quality Control Board (LA-RWQCB) in 1987, PAC agreed to install MW-1 and MW-2 at the Jet Engine Test Facility downgradient of the location of the fuel spill. In 1992, in an effort by the LA-RWQCB to assess the groundwater analytes underlying the PAC properties, monitoring well MW-3 was installed at the Jet Engine Test Cell Facility, and wells MW-4 through MW-8 were installed at the Main Facility (Figure 3-1).

The EPA issued a Unilateral Administrative Order (UAO) in 1994 which required PAC to perform soil and groundwater investigations. As part of the soil investigation, PAC conducted soil gas surveys across the PAC properties to assess the nature and extent of vapor and non-vapor phase analytes in the unsaturated zone. Since 1997, when PAC became an indirect wholly owned subsidiary of GE, PAC, through GE technical and legal representatives acting on its behalf, has been working with the LA-RWQCB to further investigate and remediate PAC properties (Tetra Tech, 2006).

Semiannual groundwater monitoring from June 1987 through December 1988 indicated elevated levels of trichloroethene (TCE) and tetrachloroethene (PCE) in monitoring wells MW-1 and MW-2 (Table 3-1). Groundwater monitoring from September 1992 through January 1995 showed PCE and TCE concentrations exceeding regulatory maximum contaminant levels (MCLs) of 5 micrograms per liter ($\mu\text{g/L}$) in wells MW-3 through MW-8 (Table 3-2). Monitoring wells MW-1 and MW-2 were both dry during this time period.



Figure 3-1 - PAC Wells Location Map

**Table 3-1
Historical Analysis From 1987 to 1989
(micrograms per liter)**

	6/18/87		12/29/87		6/14/88		12/15/88	
	PCE	TCE	PCE	TCE	PCE	TCE	PCE	TCE
WQO	5 ^{1,2}							
Composite of MW-1 & MW-2	130	32	NA	NA	NA	NA	NA	NA
MW-1	130*	32*	67	24	160	31	75	12
MW-2	130*	32*	190	41	200	33	130	15

Notes: WQO = water quality objective
 NA = Not Available
 1 California Primary Maximum Contaminant Level for Drinking Water
 2 California Secondary Maximum Contaminant Level for Drinking Water
 Analytical results exceeding the WQO are shown in **bold**
 * Result based on composite sample

**Table 3-2
Historical Analysis From 1992 to 1995
(micrograms per liter)**

Well ID	9/15-16/92		12/16-19/92		7/19-20/94		12/25-26/94		1/30-31/95	
	PCE	TCE								
WQO	5 ^{1,2}									
MW-1	dry									
MW-2	dry									
MW-3	39	11	47	12	18	6.4	58	8.8	63	7.8
MW-4	460	46	400	41	22	6.3	25	3.6	13	2.2
MW-5	2,100	440	64	13	40	8.9	150	24	49	6.9
MW-6	910	250	490	120	39	7.4	1,300	170	800	110
MW-7	87	18	420	49	43	11	2,000	88	490	19
MW-8	1,700	160	1,200	94	21	5.1	1,800	170	1,800	130

Notes: WQO = water quality objective
 1 California Primary Maximum Contaminant Level for Drinking Water
 2 California Secondary Maximum Contaminant Level for Drinking Water
 Analytical results exceeding the WQO are shown in **bold**

4.0 GROUNDWATER MONITORING PROCEDURES

4.1 GROUNDWATER LEVEL MEASUREMENTS

Water levels in the eight (8) monitoring wells were measured on December 11 and 12, 2006, using a water level meter (a liquid sensor attached to a measuring tape) that was lowered into the well until water was encountered. Water level measurements were recorded on well purging forms (Appendix A) and are presented in Table 4-1. Groundwater monitoring wells MW-1 and MW-2 were dry. Groundwater elevation contours are shown on Figure 4-1. The groundwater flow direction was to the southeast.

Table 4-1
Summary of Groundwater Elevations

Well Number	HSU	Date Measured	Top of Casing (TOC) Elevation (feet above msl)	Groundwater Depth from TOC (feet)	Groundwater Elevation (feet above msl)
MW-1	NA	NA	719.40	dry	dry
MW-2	NA	NA	720.04	dry	dry
MW-3	NA	12/11/2006	720.44	239.82	480.62
MW-4	A	12/12/2006	700.15	226.20	473.95
MW-5	A	12/12/2006	701.96	227.84	474.12
MW-6	A	12/12/2006	700.95	226.56	474.39
MW-7	A	12/11/2006	696.16	224.25	471.91
MW-8	A	12/11/2006	702.93	229.98	472.95

Notes: HSU = Hydrostatic unit
TOC = Top of casing
msl = Mean sea level
NA = Not available

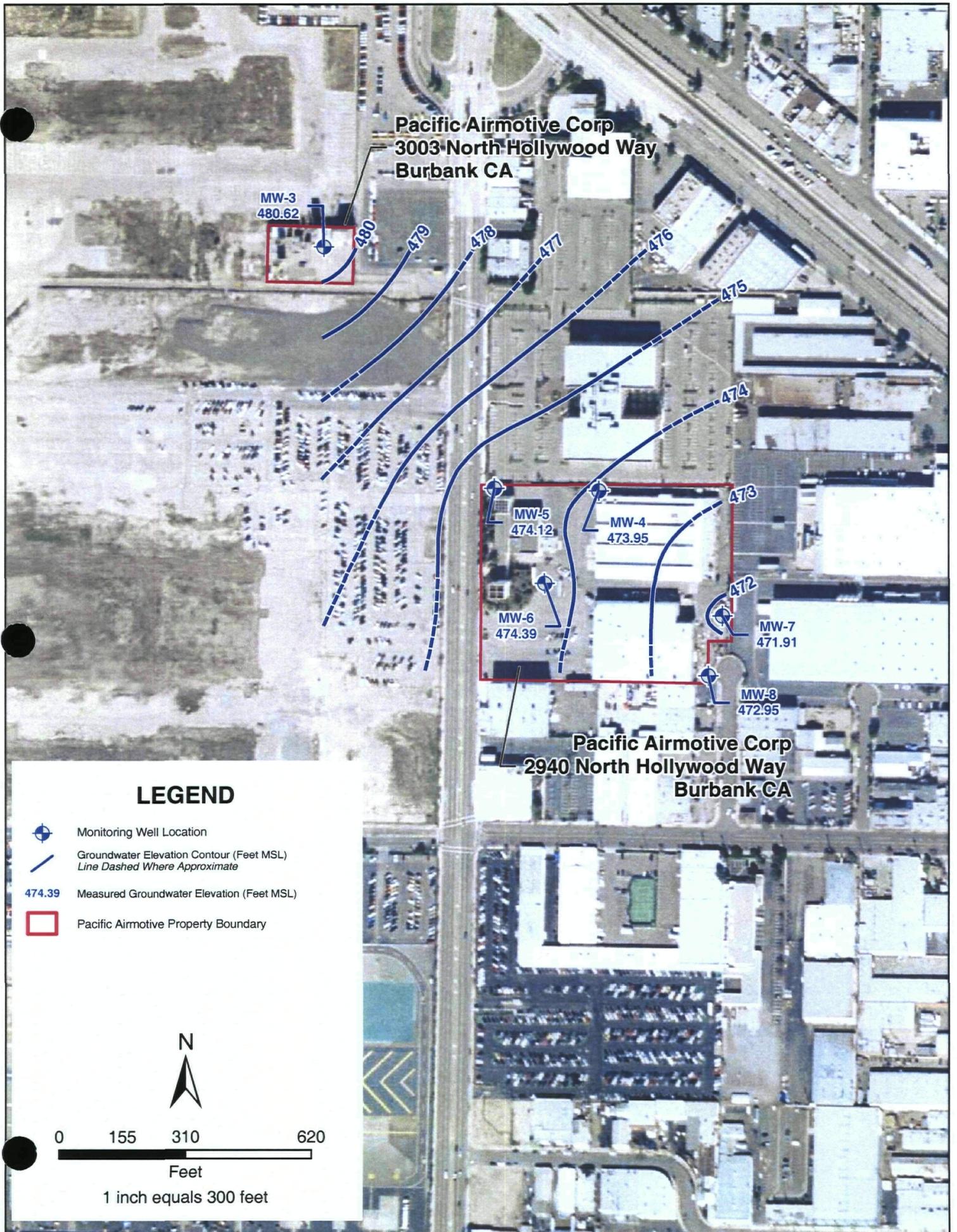


Figure 4-1 - Fourth Quarter 2006 WT HSU's Groundwater Elevation, PAC

4.2 WELL PURGING AND SAMPLING

Well development was completed in March 2006 in order to optimize groundwater production within each well prior to the initial quarterly sampling. This was done because groundwater monitoring and sampling had not been completed at the eight (8) PAC wells since 1995.

Groundwater samples collected in December 2006 were analyzed for all COCs except NDMA, perchlorate, and hexavalent chromium. Groundwater samples collected January 8 and 9, 2007, were analyzed for NDMA, perchlorate, and hexavalent chromium.

Prior to collecting the groundwater samples in December 2006, and January 2007, a minimum of three well volumes of water was purged from monitoring wells MW-3 through MW-8 using a submersible pump. Water temperature, pH, conductivity, dissolved oxygen, and turbidity were measured throughout the purging process using a field water quality monitoring system. Stabilization of these parameters served as an indication of water representative of the formation, and those values were recorded on well purging forms (Appendix A).

The groundwater samples were collected using a down-hole submersible pump at monitoring wells MW-3 through MW-8. Groundwater samples were collected from a nozzle attached to the pump hose and placed directly into sample containers provided by the laboratory. Decontamination procedures were followed after each monitoring well was sampled to avoid cross-contamination between wells. The water samples were placed on ice in a cooler to maintain a temperature of ± 4 degrees Celsius ($^{\circ}\text{C}$) pending delivery to Calscience Environmental Laboratories, Inc., a State of California certified laboratory, for analysis. A completed chain-of-custody form accompanied the shipment of samples to the laboratory to ensure accountability for the samples from the time of collection to the time of analysis.

4.3 LABORATORY ANALYSIS

Groundwater samples were collected from the six (6) groundwater monitoring wells (MW-3 through MW-8) on December 11 and 12, 2006, and January 8 and 9, 2007, at the PAC facility.

The EPA has requested that groundwater samples from the PAC wells be analyzed for specific constituents using analytical methods consistent with those of the BOU groundwater sampling events. The analytes and analytical methods are as follows:

- VOCs, including MTBE, using EPA Method 8260B;
- 1,2,3-TCP using EPA Method 524M;
- Title 22 metals, including thallium and dissolved (total) chromium, using EPA Method 6010B/7470A;
- Hexavalent chromium using EPA Method 218.6;
- 1,4-dioxane using EPA Method 8270C (M);
- NDMA using EPA Method 1625C (M);
- Perchlorate using EPA Method 314.0;
- Nitrate/nitrite using EPA Method 300.0;
- Cations using EPA Method 6010B;
- Anions using EPA Method 300.0;
- Dissolved oxygen using EPA Method SM 4500-O G; and
- Sulfide using EPA Method 376.2.

5.0 GROUNDWATER ANALYTICAL RESULTS

For the purpose of assisting the EPA in assessing the groundwater quality within the area of the eight (8) monitoring wells, the groundwater monitoring well analytical results are validated for usability and compared to their respective water quality objectives (WQOs). The following subsections detail the data validation and present the validated analytical results.

In order to meet the objective of assessing the groundwater quality in the area of the eight (8) monitoring wells, the validated analytical results from the samples collected were compared to their respective WQOs (i.e., maximum contaminant level [MCL] and/or the California drinking water notification level [CDWNL]). The MCLs or CDWNL concentrations are based on the lowest value in *A Compilation of Water Quality Goals, California Regional Water Quality Control Board, Central Valley Region*, dated September 2004 (RWQQB, 2004) and *Drinking Water Notification Levels and Response Levels: An Overview, California Department of Health Services Drinking Water Program*, dated May 12, 2006 (DHS, 2006). Copies of the laboratory analytical data reports are included in Appendix B. The validated results for the analytes detected are presented in Tables 5-1 through 5-6. A discussion of the analytical results is presented in the following subsections.

5.1 DATA VERIFICATION AND VALIDATION

In order to determine the quality and usability of the analytical results, the laboratory analytical results were reviewed and validated according to the *U.S. EPA Contract Laboratory Program National Functional Guidelines* (EPA, 2002). As part of the data evaluation, the laboratory data underwent verification and validation including laboratory control samples (LCS), matrix spike duplicates (MSD), and method blanks. All samples were validated as specified in Appendix C, which presents a summary of the quality control and quality assurance (QA/QC) procedures and the complete validated data tables used for this report.

Based on the validation of the fourth quarter 2006 analytical data, certain analytical results were qualified according to the criteria set forth in the *U.S. EPA Contract Laboratory Program National Functional Guidelines* (EPA, 2002). Data results that were estimated based on their values or QC sample fault were qualified with a “J.” Data results of specific compounds with corresponding detections in the method blank in the same analytical batch were qualified with a “B.” A description of the qualifiers is provided below.

“J” Qualified Data

With the fourth quarter 2006 analytical results, there were two (2) reasons for data to be “J” qualified. Analytical data are considered to be “J” qualified when constituents are detected at concentrations that are above the method detection limit (MDL) but below the practical quantitation limit (PQL) or reporting limit (RL) of the analytical instrument.

Analytical data may also be “J” qualified due to minor associated QC sample faults. The minor QC faults for this data set are stated in Section 1.1.3.3 of Appendix C.

For the purpose of this report, all of the data qualified as estimated with a “J” qualifier are usable.

“B” Qualified Data

The laboratory data reports from the fourth quarter 2006 also reported detections of certain compounds in the method blanks (and trip blanks). With these detections, the laboratory qualifies the data as blank contamination (with a “B” qualifier) that may have resulted from cross contamination from non-environmental sources.

During the Tetra Tech data validation process, certain laboratory “B” qualified values were reclassified utilizing the 5 times (5x) / 10 times (10x) rule as defined in the *U.S. EPA Contract Laboratory Program National Functional Guidelines*. The 5x rule is used for method blank detection of known contaminants of concern (COCs). For compounds

that are known to be common laboratory contaminants (e.g., methylene chloride, acetone), the 10x rule is applied.

Based on the 5x/10x rule, laboratory “B” qualified results for each compound that were less than or equal to 5x/10x the result reported in method blank of the same analytical batch were considered to be due to laboratory contamination. These results are presented in the summary tables as a value less than the MDL and flagged with a “B.” For the laboratory “B” qualified results that exceeded 5x/10x the result in the method blank, the actual laboratory values are presented in the summary table. The reclassification of the “B” qualified results in the laboratory data is described in Section 1.1.3.7 of Appendix C. All of the laboratory data with a “B” qualifier are usable for their intended purpose.

5.2 VOC ANALYTICAL RESULTS

Groundwater samples collected from six (6) groundwater monitoring wells were analyzed for VOCs. Based on the validation performed on the data from the VOC analyses, certain VOC results were qualified. A summary of the analytical results are presented in Table 5-1 and discussed below.

- **Acetone** was detected above the MDL in the method blank for the analytical batch containing the sample from well MW-5. Utilizing the 10x rule for common laboratory contaminants, the well sample concentration (9.3 $\mu\text{g/L}$) was below 10x the respective method blank result of 27 $\mu\text{g/L}$ (10x = 270 $\mu\text{g/L}$). Based on the data validation criteria, as detailed in Appendix C, this result is considered to be due to laboratory contamination. The result is presented in the summary table as a value less than the analytical method MDL with a “B” qualifier.
- **Bromodichloromethane** was detected in samples from two (2) groundwater wells (MW-5 and MW-6) at concentrations of 0.50 $\mu\text{g/L}$ and 0.30 $\mu\text{g/L}$, respectively, which are between the PQL/RL (1.00 $\mu\text{g/L}$) and the MDL (0.21 $\mu\text{g/L}$). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.
- **Carbon Tetrachloride** was detected in samples from three (3) groundwater wells (MW-3, MW-6, and MW-8) at concentrations of 0.87 $\mu\text{g/L}$, 2.9, and 0.64 $\mu\text{g/L}$, respectively.

In the sample from well MW-4, the reported carbon tetrachloride concentration was 0.45 $\mu\text{g/L}$, which is between the PQL/RL (0.50 $\mu\text{g/L}$) and the MDL (0.29 $\mu\text{g/L}$). Based on the reported detection, this result is considered to be an estimated value (“J” qualified) and is usable for the purpose of this report.

Additionally, carbon tetrachloride was detected in the original and duplicate samples from MW-5 at concentrations of 2.7 $\mu\text{g/L}$ and 1.9 $\mu\text{g/L}$, respectively; however the relative percent difference (RPD) between the two results was outside the control limit. Based on the reported detection, this result is also considered to be an estimated value (“J” qualified) and is usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.

- **Chloroform** was detected in samples from five (5) groundwater wells at concentrations ranging from 1.1 $\mu\text{g/L}$ (MW-4 and MW-8) to 2.6 $\mu\text{g/L}$ (MW-6).

Additionally, chloroform was reported in the sample from one (1) groundwater well (MW-7) at a concentration of 0.92 $\mu\text{g/L}$, which is between the PQL/RL (1.0 $\mu\text{g/L}$) and the MDL (0.29 $\mu\text{g/L}$). Based on the reported detection, this result is considered to be an estimated value (“J” qualified) and is usable for the purpose of this report. This value is presented in the summary table as the laboratory result value with a “J” flag.

- **1,2-Dichloroethane** was detected in the sample from one (1) groundwater well (MW-8) at a concentration of 1.9 $\mu\text{g/L}$.
- **1,1-Dichloroethene** was detected in samples from five (5) groundwater wells at concentrations ranging from 1.1 $\mu\text{g/L}$ (MW-8) to 7.0 $\mu\text{g/L}$ (MW-3).

Additionally, 1,1-dichloroethene was reported in the sample from one (1) of the groundwater wells (MW-7) at a concentration of 0.84 $\mu\text{g/L}$, which is between the PQL/RL (1.0 $\mu\text{g/L}$) and the MDL (0.26 $\mu\text{g/L}$). Based on the reported detection, this result is considered to be an estimated value (“J” qualified) and is usable for the purpose of this report. This value is presented in the summary table as the laboratory result value with a “J” flag.

- **Tetrachloroethene** was detected in samples from all six (6) groundwater wells at concentrations ranging from 22 $\mu\text{g/L}$ (MW-7) to 140 $\mu\text{g/L}$ (MW-8).
- **Toluene** was detected above the MDL in the method blank and the trip blank for the analytical batch containing the sample from well MW-4. Utilizing the 5x rule, the well sample concentration (0.23 $\mu\text{g/L}$) was below 5x the respective method blank result of 0.24 $\mu\text{g/L}$ ($5x = 1.2$) and below 5x the trip blank result of 0.46 $\mu\text{g/L}$ ($5x = 2.3$ $\mu\text{g/L}$). Based on the data validation criteria, as detailed in Appendix C, this result is considered to be due to laboratory contamination. The result is presented in the summary table as a value less than the analytical method MDL with a “B” qualifier.
- **1,1,1-Trichloroethane** was detected in the sample from groundwater well MW-6 at a concentration of 0.51 $\mu\text{g/L}$, which is between the PQL/RL (1.00 $\mu\text{g/L}$) and the MDL (0.35 $\mu\text{g/L}$). Based on the reported detection, this result is considered to

be an estimated value (“J” qualified) and is usable for the purpose of this report. This value is presented in the summary table as the laboratory value with a “J” qualifier.

- **Trichloroethene** was detected in samples collected from all six (6) groundwater wells at concentrations ranging from 8.8 µg/L (MW-7) to 69 µg/L (MW-5).
- **1,1,2-Trichloro-1,2,2-trifluoroethane** was detected above the MDL in the trip blank for the analytical batch containing the samples from three (3) wells. 1,1,2-Trichloro-1,2,2-trifluoroethane was detected in samples from wells MW-3, MW-7, and MW-8 at concentrations of 2.7 µg/L, 1.6 µg/L, and 2.0 µg/L, respectively. Utilizing the 5x rule, these results are below 5x their respective trip blank detection of 0.62 µg/L (5x = 3.1 µg/L) and are considered to be due to laboratory contamination. These results are presented in the summary table as a value less than the MDL with a “B” qualifier.

Additionally, 1,1,2-trichloro-1,2,2-trifluoroethane was reported in samples from three (3) of the groundwater wells (MW-4, MW-5, and MW-6) at concentrations of 1.3 µg/L, 2.8 µg/L, and 2.0 µg/L, respectively, which are between the PQL/RL (10.0 µg/L) and the MDL (0.61 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report.

A review of the VOC analytical data shows that five (5) compounds were detected at concentrations above their respective WQOs. Carbon tetrachloride was detected above the WQO of 0.5 µg/L in samples from four (4) groundwater wells MW-3, MW-5, MW-6 and MW-8. The compound 1,2-dichloroethane was detected above the WQO of 0.5 µg/L in one (1) groundwater sample from well MW-8. The compound 1,1-dichloroethene was detected above the WQO of 6 µg/L in samples from two wells (MW-3 and MW-5). Tetrachloroethene was detected above the WQO of 5 µg/L in all six (6) groundwater samples. Trichloroethene was also detected above the WQO of 5 µg/L in all six (6) groundwater samples.

Table 5-1
Summary of Detected VOCs Analytical Results
EPA Method 8260B
(micrograms per liter)

Well ID	Acetone	Bromodichloromethane	Carbon Tetrachloride	Chloroform	1,2-Dichloroethane	1,1-Dichloroethene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	1,1,2-Trichloro-1,2,2-trifluoroethane
WQO	NA	80 ^{1,2}	0.5 ²	80 ^{1,2}	0.5 ²	6 ²	5 ^{1,2}	150 ²	200 ^{1,2}	5 ^{1,2}	1,200 ²
MW-3	<7.0	<0.21	0.87	1.6	<0.25	7	87	<0.23	<0.35	27	<0.61 ^B
MW-4	<7.0	<0.21	0.45 ^J	1.1	<0.25	1.3	25	<0.23 ^B	<0.35	11	1.3 ^J
MW-5	<7.0 ^B	0.50 ^J	2.7 ^J	2.5	<0.25	6	91	<0.23	<0.35	69	2.8 ^J
MW-6	<7.0	0.30 ^J	2.9	2.6	<0.25	3.2	80	<0.23	0.51 ^J	57	2.0 ^J
MW-7	<7.0	<0.21	<0.29	0.92 ^J	<0.25	0.84 ^J	22	<0.23	<0.35	8.8	<0.61 ^B
MW-8	<7.0	<0.21	0.64	1.1	1.9	1.1	140	<0.23	<0.35	54	<0.61 ^B

Notes: NA = not available
WQO = water quality objective
1 U.S. Environmental Protection Agency Maximum Contaminant Level for Drinking Water
2 California Primary Maximum Contaminant Level for Drinking Water
B Analyte was present in the associated method or trip blank.
J Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
Analytical results exceeding the WQO are shown in **bold**

5.3 EMERGENT CHEMICALS ANALYTICAL RESULTS

Groundwater samples collected from the six (6) monitoring wells were analyzed for 1,4-dioxane, NDMA, and 1,2,3-TCP. Based on the validation performed on the data from the emergent chemical analyses, all of the results are deemed usable. A summary of the analytical results is presented in Table 5-2 and discussed below.

- **1,4-Dioxane** was detected in the sample from one (1) groundwater well (MW-8) at a concentration of 2.5 µg/L.

Additionally, 1,4-dioxane was reported in the sample from one (1) groundwater well (MW-3) at a concentration of 1.4 µg/L, which is between the PQL/RL (2.0 µg/L) and the MDL (0.40 µg/L). Based on the reported detection, this result is considered to be an estimated value (“J” qualified) and is usable for the purpose of this report.

- **NDMA** was not detected above the laboratory reporting limit in any of the groundwater samples.
- **1,2,3-TCP** was detected in samples from all six (6) groundwater wells at concentrations ranging from 0.013 µg/L (MW-7) to 0.18 µg/L (MW-5).

A review of the emergent chemical analytical data reveals that 1,2,3-TCP was detected above its WQO of 0.005 µg/L in all six (6) groundwater samples.

Table 5-2
Emergent Chemicals Analytical Results
(micrograms per liter)

Well ID	1,4-Dioxane by EPA Method 8270C (M)	NDMA by EPA Method 1625C(M)	1,2,3-TCP by EPA Method 524M
WQO	3¹	0.01¹	0.005¹
MW-3	1.4 ^J	<0.00048	0.15
MW-4	<0.40	<0.00048	0.02
MW-5	<0.40	<0.00048	0.18
MW-6	<0.40	<0.00048	0.14
MW-7	<0.40	<0.00048	0.013
MW-8	2.5	<0.00048	0.11

Notes: NDMA = N-Nitrosodimethylamine.
 1,2,3-TCP = 1,2,3-Trichloropropane.
 WQO = water quality objective
 1 California Drinking Water Notification Level
 Analytical results exceeding the WQO are shown in **bold**

5.4 DISSOLVED IRON AND MANGANESE ANALYTICAL RESULTS

It should be noted that samples were inadvertently not collected or analyzed for dissolved iron and manganese as required in the EPA letter. However, based on the data collected from the previous three (3) consecutive quarters, the analytical results for dissolved iron and manganese have been consistently below their MCLs of 0.3 mg/L and 0.05 mg/L, respectively.

5.5 INORGANIC ANALYTICAL RESULTS

Groundwater samples collected from all six (6) monitoring wells were analyzed for hexavalent chromium, perchlorate, anions, dissolved oxygen and other constituents. Based on the validation performed on the data from the inorganics analyses, certain hexavalent chromium and perchlorate results were qualified. However, all of the results from the analyses were deemed usable. A summary of the analytical results is presented in Table 5-3 and discussed below.

- **Hexavalent Chromium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 0.0016 milligrams per liter (mg/L) (MW-4, MW-7, and MW-8) to 0.0032 mg/L (MW-6).
- **Chloride** was detected in samples from all six (6) groundwater wells at concentrations ranging from 39 mg/L (MW-5) to 46 mg/L (MW-4).
- **Nitrite** was not detected above the laboratory reporting limit in any of the groundwater samples.
- **Nitrate** was detected in samples from all six (6) groundwater wells at concentrations ranging from 10 mg/L (MW-7) to 12 mg/L (MW-3 and MW-5).
- **Sulfate** was detected in all six (6) groundwater samples at concentrations ranging from 74 mg/L (MW-8) to 80 mg/L (MW-4).
- **Sulfide** was not detected above the laboratory reporting limit in any of the groundwater samples.
- **Perchlorate** was not detected above the laboratory reporting limit in any of the groundwater samples.
- **Dissolved Oxygen** was detected in samples from all six (6) groundwater wells at concentrations ranging from 7.02 mg/L (MW-5) to 7.82 mg/L (MW-3).

A review of the inorganic analytical data reveals that only nitrate was detected above its WQO of 10 mg/L. Nitrate was detected in all six (6) groundwater samples.

**Table 5-3
Inorganic Analytical Results
(milligrams per liter)**

Well ID	Hexavalent Chromium	Chloride	Nitrite	Nitrate	Sulfate	Sulfide	Perchlorate	Dissolved Oxygen
WQO	0.05 ¹	250 ²	1 ¹	10 ⁴	250 ²	NA	4 ³	NA
MW-3	0.0018	41	<0.015	12	78	<0.042	<0.00043	7.82
MW-4	0.0016	46	<0.015	11	80	<0.042	<0.00043	7.35
MW-5	0.0019	39	<0.015	12	76	<0.042	<0.00043	7.02
MW-6	0.0032	42	<0.015	11	78	<0.042	<0.00043	7.05
MW-7	0.0016	45	<0.015	10	79	<0.042	<0.00043	7.45
MW-8	0.0016	40	<0.015	11	74	<0.042	<0.00043	7.61

Notes: NA = not available.
WQO = water quality objective
1 California Primary Maximum Contaminant Level for Drinking Water (Hexavalent chromium currently regulated using Maximum Contaminant Level for total chromium).
2 California Secondary Maximum Contaminant Level for Drinking Water
3 California Drinking Water Notification Level
4 U.S. Environmental Protection Agency Primary Maximum Contaminant Level for Drinking Water
J Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
Analytical results exceeding the WQO are shown in **bold**

5.6 CATION ANALYTICAL RESULTS

Groundwater samples collected from all six (6) monitoring wells were analyzed for cations. Based on the validation performed on the data from the cation analyses, all of the results from the chemical analyses are deemed usable. A summary of the analytical results is presented in Table 5-4 and discussed below.

- **Calcium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 101 mg/L (MW-4 and MW-8) to 105 mg/L (MW-6).
- **Magnesium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 30.1 mg/L (MW-5) to 34.3 mg/L (MW-7).
- **Potassium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 5.24 mg/L (MW-4) to 5.47 mg/L (MW-6).
- **Sodium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 36.8 mg/L (MW-5) to 39.5 mg/L (MW-7).

California drinking water notification levels and MCLs have not been established for cations.

Table 5-4
Cations Analytical Results
EPA Method 6010B
(milligrams per liter)

Well ID	Calcium	Magnesium	Potassium	Sodium
WQO	NA	NA	NA	NA
MW-3	102	31.5	5.39	37
MW-4	101	33.8	5.24	39.3
MW-5	103	30.1	5.42	36.8
MW-6	105	30.3	5.47	37.1
MW-7	102	34.3	5.25	39.5
MW-8	101	32.2	5.32	37.5

Notes: NA = Not available
WQO = water quality objective

5.7 TITLE 22 METAL ANALYTICAL RESULTS

Groundwater samples collected from all six (6) monitoring wells were analyzed for Title 22 metals. Based on the validation performed on the data from the Title 22 metals analyses, certain metals results were qualified. A summary of the analytical results is presented in Table 5-5 and only metal analytes detected above the laboratory reporting limit are listed below.

- **Antimony** was detected above the MDL in the method blank for the analytical batch containing the sample from well MW-3. Utilizing the 5x rule, the well sample concentration (2.73 $\mu\text{g/L}$) was below 5x the respective method blank result of 6.57 $\mu\text{g/L}$ (5x = 32.85 $\mu\text{g/L}$). Based on the data validation criteria, as detailed in Appendix C, this result is considered to be due to laboratory contamination. The result is presented in the summary table as a value less than the analytical method MDL with a “B” qualifier.
- **Arsenic** was detected above the MDL in the method blank for the analytical batch containing the samples from three (3) wells. Arsenic was detected in samples from wells MW-3, MW-5, and MW-8 at concentrations of 4.82 $\mu\text{g/L}$, 4.38 $\mu\text{g/L}$, and 4.43 $\mu\text{g/L}$, respectively. Utilizing the 5x rule, these results are below 5x their

respective method blank detection of 6.52 µg/L (5x = 32.6 µg/L) and are considered to be due to laboratory contamination. These results are presented in the summary table as a value less than the MDL with a “B” qualifier.

- **Barium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 138 µg/L (MW-5) to 150 µg/L (MW-7).
- **Beryllium** was detected in samples from three (3) groundwater wells (MW-5, MW-6, and MW-8) at concentrations of 0.184 µg/L, 0.177 µg/L, and 0.181 µg/L, respectively, which are between the PQL/RL (1.00 µg/L) and the MDL (0.176 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.
- **Chromium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 1.87 µg/L (MW-7) to 3.98 µg/L (MW-6), which are between the PQL/RL (5.00 µg/L) and the MDL (0.35 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.
- **Lead** was detected in samples from three (3) groundwater wells (MW-5, MW-6, MW-8) at concentrations of 11 µg/L, 11.1 µg/L, and 10.4 µg/L, respectively.

Additionally, lead was reported in samples from three (3) groundwater wells (MW-3, MW-4, and MW-7) at concentrations of 8.74 µg/L, 7.91 µg/L, and 9.71 µg/L, respectively, which are between the PQL/RL (10.0 µg/L) and the MDL (2.36 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report.

- **Molybdenum** was detected in samples from all six (6) groundwater wells at concentrations ranging from 5.1 µg/L (MW-3) to 7.29 µg/L (MW-4).

Selenium was detected in samples from four (4) groundwater wells at concentrations ranging from 17.2 µg/L (MW-3) to 19.8 µg/L (MW-4).

Additionally, selenium was detected in samples from two (2) groundwater wells (MW-5 and MW-7) at concentrations of 15.8 µg/L and 13.9 µg/L, respectively, which are between the PQL/RL (15.0 µg/L) and the MDL (2.95 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory result value with a “J” flag.

- **Thallium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 2.46 µg/L (MW-3) to 12.8 µg/L (MW-6), which are between the PQL/RL (15.0 µg/L) and the MDL (2.33 µg/L). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.

-
- **Vanadium** was detected in samples from all six (6) groundwater wells at concentrations ranging from 3.60 $\mu\text{g/L}$ (MW-5) to 4.67 $\mu\text{g/L}$ (MW-7), which are between the PQL/RL (5.00 $\mu\text{g/L}$) and the MDL (0.314 $\mu\text{g/L}$). Based on the reported detections, these results are considered to be estimated values (“J” qualified) and are usable for the purpose of this report. These values are presented in the summary table as the laboratory value with a “J” qualifier.
 - **Zinc** was detected in samples from five (5) groundwater wells at concentrations ranging from 11.8 $\mu\text{g/L}$ (MW-7) to 72.8 $\mu\text{g/L}$ (MW-8).

Additionally, zinc was detected in the sample from one (1) groundwater well (MW-5) at a concentration of 7.67 $\mu\text{g/L}$, which is between the PQL/RL (10.0 $\mu\text{g/L}$) and the MDL (0.848 $\mu\text{g/L}$). Based on the reported detection, this result is considered to be an estimated value (“J” qualified) and is usable for the purpose of this report. This value is presented in the summary table as the laboratory result value with a “J” flag.

A review of analytical results for metals reveals that only thallium was detected above its WQO of 2 $\mu\text{g/L}$ in all groundwater samples.

**Table 5-5
Title 22 Metals Analytical Results
EPA Method 6010B/7470A
(micrograms per liter)**

Well ID	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
WQO	6 ¹	50 ¹	1,000 ¹	4 ¹	5 ¹	50 ¹	NA	1,000 ²	15 ¹	2 ¹	NA	100 ¹	50 ¹	100 ²	2 ¹	NA	5,000 ²
MW-3	<2.09 ^B	<3.08 ^B	139	<0.176	<0.350	2.17 ^J	<0.696	<1.34	8.74 ^J	<0.0177	5.1	<1.37	17.2	<0.400	2.46 ^J	3.92 ^J	25.4
MW-4	<2.09	<3.08	148	<0.176	<0.350	2.03 ^J	<0.696	<1.34	7.91 ^J	<0.0177	7.29	<1.37	19.8	<0.400	9.39 ^J	4.48 ^J	14.1
MW-5	<2.09	<3.08 ^B	138	0.184 ^J	<0.350	2.49 ^J	<0.696	<1.34	11	<0.0177	5.68	<1.37	15.8 ^J	<0.400	9.74 ^J	3.60 ^J	7.67 ^J
MW-6	<2.09	<3.08	141	0.177 ^J	<0.350	3.98 ^J	<0.696	<1.34	11.1	<0.0177	6.89	<1.37	17.8	<0.400	12.8 ^J	3.76 ^J	12.1
MW-7	<2.09	<3.08	150	<0.176	<0.350	1.87 ^J	<0.696	<1.34	9.71 ^J	<0.0177	6.13	<1.37	13.9 ^J	<0.400	2.52 ^J	4.67 ^J	11.8
MW-8	<2.09	<3.08 ^B	145	0.181 ^J	<0.350	1.90 ^J	<0.696	<1.34	10.4	<0.0177	6.26	<1.37	18.3	<0.400	4.02 ^J	4.20 ^J	72.8

Notes:

WQO = water quality objective

NA = not available

1 California Primary Maximum Contaminant Level for Drinking Water

2 California Secondary Maximum Contaminant Level for Drinking Water

B Analyte was present in the associated method or trip blank.

J Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

Analytical results exceeding the WQO are shown in **bold**

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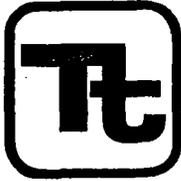
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DAILY REPORT
 Date: 11/29/06

S M T W TH F S

Page 1 of 1

CUSTOMER: LMIT TC NO.: 17653-0302 LOCATION: A-1 North
 Type of Work: Well gauging and monitoring, Survey.

Summary of Work Activities

0700	Arrived Main Office, pick up Geosanta, Ladder, Honda back to A-1 North				
0800	Arrived A-1 North, unload stuff, reload sounding equipment.				
0830	Set out to gauge B1-CW-B, B1-CW-28 at 1928 Fashion Street				
0910	Gauge V08				
0930	Pac Well site, meet Westland Survey team and show them the locations for Survey.				
	PAC WELL Location				
	MW 1	239.48	1101	11/29/06	(TD 256) approx.
	MW 2	dry	1025	11/29/06	
	MW 3	239.82	1109	11/29/06	
	MW 4	226.20	0938	11/29/06	
	MW 5	227.84	1010	11/29/06	
	MW 6	226.56	0955	11/29/06	
	MW 7	224.25	1125	11/29/06	
	MW 8	229.98	1133	11/29/06	

DO PAC WELLS GAUGING AND MONITORING

1300 Go To City of Burbank to get street use permit, need Certificate of insurance.
 1350 Back to Westland Survey area to stay with the surveying crews in PAC Wells lot. for security purpose
 1450 Back to COB to get permit, they need more documents
 1500 Back to office.

By: [Signature] Title: _____



TETRA TECH, INC.
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Fax (626) 351-5291

WELL PURGING FORM

Date: 12-11-06

TC# 17653-0604
Location PAC WELL
Client LMT

Page 1 of 1

Sampler Troy

Well ID: MW-7 Well Diameter: 4" Depth-to-Water: 224.25
 Gauging Date: 11/29/06 Purging Method: Sub. Pump Depth-to-Bottom: 260.00
 Purging Date: 12-11-06 Sampling Method: _____ Water Column (ft): 35.7 x 0.65
 Sampling Date: 12-11-06
SAMPLE TIME: 1025
 WELL PURGING:

Calculate volume of water to purge:
23.2 gals X 3 vol/gals = 69.7 gals
 (1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
4 inch	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL PURGED
0952	19.6	.657	7.40	19	0.03	6.47	0
0955	20.0	.657	7.33	18	0.02	5.98	9
0958	19.8	.632	7.36	15	0.01	6.94	18
1002	20.6	.644	7.31	13	0.02	5.86	27
1005	20.7	.653	7.31	9	0.02	5.61	36
1008	20.7	.651	7.32	7	0.02	5.54	45
1011	20.7	.651	7.32	5	0.02	5.57	54
1014	20.7	.650	7.32	4	0.02	5.57	63
1018	20.8	.648	7.32	3	0.02	5.59	70

7 min

Comments: _____

* WATER CLEAR

* SAMPLE TIME: 1025

* FLOW RATE 39 gpm



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WELL PURGING FORM
Date: 12-11-06

TC# 17653-0604
Location PAC WELLS
Client LMT

Page 1 of 1

Sampler Tangth

Well ID: MW-8 Well Diameter: 4" Depth-to-Water: 229.98
 Gauging Date: 11/29/06 Purging Method: Sub. Pump Depth-to-Bottom: 268.00
 Purging Date: 12-11-06 Sampling Method: _____ Water Column (ft): 38.02 x 0.65
 Sampling Date: 12-11-06
 Sample Time: 0840
 WELL PURGING:

Calculate volume of water to purge:
24.7 gals x 3 vol = 74.1 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	<u>0.65</u>
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
0821	17.7	.677	6.84	27	0.02	5.85	0
0824	19.2	.665	6.87	19	0.02	5.88	9
0827	20.3	.662	6.92	11	0.02	5.89	18
0830	20.4	.665	7.29	3	0.02	5.56	27
0833	20.5	.663	7.30	2	0.02	5.52	36
0836	20.6	.660	7.31	2	0.02	5.52	45
0839	20.7	.658	7.32	1	0.02	5.60	54
0832	20.7	.656	7.32	1	0.02	5.66	63
0835	20.7	.655	7.32	2	0.02	5.70	74

Comments: Flow rate - 30 gpm * WATER CLEAR

* SAMPLE TIME: 0840



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WELL PURGING FORM

Date: 12-11-06

TC# 17653-0604

Page 1 of 1

Location PAC WELLS

Client LMT

Sampler Tough

Well ID: <u>MW-1</u>	Well Diameter: <u>4"</u>	Depth-to-Water: <u>239.48</u>
Gauging Date: <u>11/29/06</u>	Purging Method: _____	Depth-to-Bottom: <u>256.50</u>
Purging Date: <u>12-11-06</u>	Sampling Method: _____	Water Column (ft): <u>17.00 x 0.65</u>
Sampling Date: <u>12-11-06</u>		

WELL PURGING:

Calculate volume of water to purge:

11 gals X 3 $\frac{\text{vol}}{\text{gals}}$ = 33 gals

(1 casing volume) (no. of volumes to purge) (total volume to purge)

Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	<u>0.65</u>
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
							0
							86
							1612
							2410
							3224
							33

no sample

FLOWRATE: 2 gpm

Comments: NEED TO MAKE DUPLICATE SAMPLES (MW-11)

* 1325: WELL DID NOT HAVE ENOUGH WATER TO PUMP OUT.
DEPTH WAS 248'. NO SAMPLES & READINGS TAKEN.

SAMPLE TIME: MW-1

MW-11

(duplicate)

3



TETRA TECH, INC.
 3475 E. Foothill Blvd.
 Pasadena, CA 91107
 (828) 351-4664
 Fax (828) 351-5291

WELL PURGING FORM
 Date: 12-11-06

TC# 17653-0604 Page 1 of 1
 Location PAC WELLS
 Client LMT Sampler Tong

Well ID: MW-3 Well Diameter: 4" Depth-to-Water: 239.82
 Gauging Date: - Purging Method: - Depth-to-Bottom: 284.50
 Purging Date: 12-11-06 Sampling Method: - Water Column (ft): 44.6 x06.5
 Sampling Date: 12-11-06
 Sample Time: 1150 Flow Rate: 3 gpm
 WELL PURGING:

Calculate volume of water to purge:
29.0 gals x 3 vol = 87.1 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	<u>0.85</u>
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL PURGED
1117	20.0	.651	7.11	18	0.02	5.51	0
1121	20.1	.653	7.12	15	0.02	5.54	12
1125	20.6	.666	7.19	6	0.02	5.62	24
1129	20.9	.667	7.20	3	0.02	5.58	36
1133	21.0	.658	7.21	4	0.02	5.58	48
1137	21.1	.655	7.21	3	0.02	5.60	60
1141	21.1	.652	7.22	3	0.02	5.63	72
1145	21.1	.652	7.23	1	0.02	5.68	84

4 min

Comments: _____

* Sample Time: 1150 * WATER CLEAR
 * Flow Rate: 3 gpm



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WELL PURGING FORM
 Date: 12/12/06

TC# 17653-0604 Page 1 of 1
 Location Bon
 Client LMT Sampler Ng

Well ID: MW-4 Well Diameter: 4" Depth-to-Water: 226.20
 Gauging Date: 11/29/06 Purging Method: Sub. pump Depth-to-Bottom: 264.50
 Purging Date: 12/12/06 Sampling Method: _____ Water Column (ft): 38.30
 Sampling Date: 12/12/06
 Sample Time: 1041
 WELL PURGING: Flow rate: 3 gpm

Calculate volume of water to purge:
25 gals x 3 gals = 75 gals
 (1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1011	21.9	0.928	5.70	2.3	0.0	8.84	0
1015	21.1	0.937	5.83	1.2	0.0	7.92	12
1019	21.3	0.935	5.98	0.5	0.0	7.54	24
1023	21.4	0.935	5.97	0.1	0.0	7.50	36
1027	21.3	0.937	5.96	0.7	0.0	7.43	48
1031	21.2	0.939	5.96	0.0	0.0	7.55	60
1035	21.3	0.937	5.98	0.0	0.0	7.68	72
1038	21.4	0.937	5.97	0.0	0.0	7.70	75

.59
 .58
 .58
 .59
 .58
 .60
 .60

Comments: Flow rate



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WELL PURGING FORM
Date: 12/12/07

TC# 17653-0604 Page 1 of 1
Location BOL
Client CAIT Sampler Ng

Well ID: MW-5 Well Diameter: 4" Depth-to-Water: 227.84
Gauging Date: 11/28/06 Purging Method: Sub-pump Depth-to-Bottom: 269.50
Purging Date: 12/12/06 Sampling Method: _____ Water Column (ft): 41.66
Sampling Date: 12/12/06
Sampling Time: 0904
WELL PURGING: Flow rate: 3 gpm

Calculate volume of water to purge:
27 gals X 3 gals = 81 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)
Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	<u>0.65</u>
6 inch	1.27
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
0832	18.9	0.955	6.81	172	0.0	7.64	12
0836	20.6	0.964	5.92	188	0.0	7.31	12
0840	20.3	0.989	5.65	13.9	0.0	7.06	24
0844	20.8	0.977	5.83	81.2	0.0	7.15	36
0848	20.5	0.967	5.95	41.8	0.0	7.55	48
0852	21.2	0.922	5.94	7.7	0.0	6.02	60
0856	20.8	0.900	5.96	3.9	0.0	6.92	72
0859	20.9	0.910	5.96	4.2	0.0	6.38	81
0802	21.0	0.905	5.95	4.8	0.0	6.35	90

TDS
.61
.62
.61
.59
.59

Comments: Duplicate sample MW-55 0950
MW-5 0904



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WELL PURGING FORM

Date: 12/12/06

TC# 17653-0602

Page 1 of 1

Location Boru

Client LMT

Sampler Wg

Well ID: MW-6 Well Diameter: 4" Depth-to-Water: 226.52
 Gauging Date: 11/29/06 Purging Method: Sub pump Depth-to-Bottom: 265.00
 Purging Date: 12/12/06 Sampling Method: _____ Water Column (ft): 38.50
 Sampling Date: 12/12/06
 Sampling Time 1141
 WELL PURGING: Flowrate & gpm

Calculate volume of water to purge:
25.5 gals x 3 gals = 77 gals
 (1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1114	21.5	0.890	5.93 7.2	10.2	0.0	8.75	0
1117	20.9	0.929	6.11	22.4	0.0	8.03	12 .60
1120	20.8	0.920	6.07	14.3	0.0	6.79	24 .59
1123	20.9	0.915	6.14	6.3	0.0	6.56	36 .59
1126	20.9	0.921	6.03	0.5	0.0	6.46	48 .59
1129	20.9	0.919	6.06	0.9	0.0	6.17	60
1132	20.9	0.915	5.96	4.3	0.0	6.12	72 .59
1134	20.9	0.916	5.95	3.0	0.0	6.09	77 .59

Comments: MW6 - MS/MSD samples 1141



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WELL PURGING FORM

Date: 11/8/07

TC# 17653-0604

Page 1 of 1

Location PAC WELL

Client LMT

Sampler Norman Ng

Well ID: MW-5 Well Diameter: 4" Depth-to-Water: 226.74
 Gauging Date: 1/8/07 Purging Method: Centrifuge pump Depth-to-Bottom: 269.52
 Purging Date: 1/8/07 Sampling Method: sample port Water Column (ft): 42.76 x .65
 Sampling Date: 1/8/07

WELL PURGING: Rate 3GPM

Calculate volume of water to purge:

28 gals X 3 gals = 84 gals

(1 casing volume) (no. of volumes to purge) (total volume to purge)

Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC μ S/cm	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
0856	19.7	0.92	6.59	167	0.04	8.97	0
0859	19.8	0.775	6.88	56	0.03	8.95	9
0902	20.2	0.771	6.83	20	0.03	8.94	18
0905	20.7	0.768	6.83	5	0.03	8.83	27
0908	21.3	0.771	6.88	1	0.03	8.46	36
0911	21.4	0.770	6.86	0	0.03	8.39	45
0914	21.5	0.769	6.85	1	0.03	8.51	54
0917	21.7	0.768	6.84	1	0.03	8.48	63
0920	21.7	0.767	6.90	1	0.03	8.55	72
0924	21.6	0.763	6.86	1	0.03	8.58	84

Comments:

START Purging 0856

Sample time 0926



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WELL PURGING FORM
Date: 01/08/2007

TC# 17653-0604 Page 1 of 1
Location Bou / PAC WELL
Client LMT Sampler N3

Well ID: MW-4 Well Diameter: 4" Depth-to-Water: 224.98
Gauging Date: 1/8/07 Purging Method: Centrifugal Pump Depth-to-Bottom: 264.50
Purging Date: 1/8/07 Sampling Method: Sampling port Water Column (ft): 39.52 x .65
Sampling Date: 1/8/07
WELL PURGING: Rate: 4 GPM

Calculate volume of water to purge:
26 gals X 3 gals = 78 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)
Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC μ S/cm	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1037	27.2	0.79	6.84	107	0.03	7.46	0
1040	21.4	0.79	6.89	42	0.03	9.49	12
1043	21.6	0.783	6.91	16	0.03	9.39	24
1046	21.5	0.779	6.86	6	0.03	9.54	36
1049	21.5	0.778	6.88	1	0.03	9.72	48
1052	21.5	0.780	6.86	2	0.03	9.66	60
1055	21.5	0.782	6.88	0	0.03	9.88	72
1057	21.5	0.779	6.87	0	0.03	9.67	78
1058		sample -					

Comments: Start Purging 1037
Sample time 1058



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WELL PURGING FORM

Date: 01/08/07

TC# 17653-0604 Page 1 of 1
Location Bou / PAC WELL
Client TMT Sampler Ng

Well ID: MW-6 Well Diameter: 4" Depth-to-Water: 22530
Gauging Date: 1/8/07 Purging Method: 3" Grundfos pump Depth-to-Bottom: 265.00
Purging Date: 1/8/07 Sampling Method: grab Water Column (ft): 39.70
Sampling Date: 1/8/07

WELL PURGING: Rate: 5 gpm

Calculate volume of water to purge:
26 gals x 3 gals = 78 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)

Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC mS/cm	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1222	27.2	.789	6.98	89	0.03	8.75	0
1225	22.1	.768	6.99	32	0.03	10.88	15
1228	21.7	.762	6.98	7	0.03	10.78	30
1231	21.6	.765	6.97	5	0.03	10.49	45
1234	21.5	.763	6.95	3	0.03	10.55	60
1238	21.3	.766	6.95	1	0.03	10.43	78
1240	Sample						

Comments: Start Purging 1222
Sample time 1240



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WELL PURGING FORM

Date: 1/8/07

TC# 17653-0604 Page 1 of 1
 Location Born / PAC Well
 Client UW Sampler Neg

Well ID: MW-3 Well Diameter: 4" Depth-to-Water: 238.75
 Gauging Date: 1/8/09 Purging Method: 3' grout foot Depth-to-Bottom: 284.50
 Purging Date: 1/8/07 Sampling Method: Grab Water Column (ft): 45.75
 Sampling Date: 1/8/07
 WELL PURGING: Rate: 6 GPM

Calculate volume of water to purge:
29.5 gals X 3 gals = 88.5 gals
 (1 casing volume) (no. of volumes to purge) (total volume to purge)
 Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
4 inch	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC mS/cm	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1411	29.6	0.91	7.09	179	0.02	9.84	0
1414	22.6	0.765	7.06	47	0.03	12.89	18
1417	22.2	0.761	7.04	12	0.03	13.00	36
1420	21.6	0.764	7.00	4	0.03	12.35	54
1423	21.5	0.762	6.92	3	0.03	12.29	72
1427	21.4	0.769	6.90	4	0.03	12.20	90
1428	Sample						

Comments: Sample Time 1428



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WELL PURGING FORM

Date: 1/09/07

TC# 17653-0604 Page 1 of 1
 Location Bon / PAC WELL
 Client LMT Sampler Ng

Well ID: MW-7 Well Diameter: 4" Depth-to-Water: 223.02
 Gauging Date: 1/9/07 Purging Method: 3" Grundfos Depth-to-Bottom: 260.00
 Purging Date: 1/9/07 Sampling Method: Sampling Port Water Column (ft): 37.00
 Sampling Date: 1/9/07

WELL PURGING: Rate: 4 gpm

Calculate volume of water to purge:

24 gals X 3 gals = 72 gals

(1 casing volume) (no. of volumes to purge) (total volume to purge)

Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
1047	23.9	.711	7.27	119	0.03	10.79	0
1051	21.4	.774	7.47	22	0.03	11.45	16
1055	21.5	.710	7.18	15	0.03	11.09	32
1059	21.3	.755	6.92	5	0.03	10.68	48
1103	21.4	.773	7.01	3	0.03	10.54	64
1105	21.	.776	6.91	4	0.03	10.38	72
Sample time		1107					

Comments: Sample time 1107



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WELL PURGING FORM

Date: 1/9/07

TC# 17653-0604 Page 1 of 1
Location Bou / PAC wells
Client LMI Sampler Neg

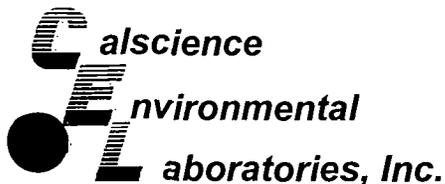
Well ID: MW-8 Well Diameter: 4" Depth-to-Water: 228.59
Gauging Date: 1/9/07 Purging Method: 3" Grundfos Depth-to-Bottom: 268.00
Purging Date: 1/9/07 Sampling Method: Grabs Water Column (ft): 39.41 x .65
Sampling Date: 1/9/07 Duplicate Sample
WELL PURGING: Rate: 5 GPM

Calculate volume of water to purge:
26 gals X 3 gals = 78 gals
(1 casing volume) (no. of volumes to purge) (total volume to purge)
Note: water column x multiplier = casing volume

Well Diameter	Multiplier
1 inch	0.04
2 inch	0.16
3 inch	0.37
<u>4 inch</u>	0.65
6 inch	1.47
Other	radius (squared) x 0.163

TIME	TEMP (DEG F°)	EC	pH	TURBIDITY (NTU)	SALINITY	DO	TOTAL GAL. PURGED
0847	19.8	.97	7.03	220	0.04	10.51	0
0850	20.7	.793	7.25	42	0.03	9.60	15
0853	20.4	.784	7.27	9	0.03	9.28	30
0856	20.5	.784	7.32	2	0.03	9.12	45
0859	20.6	.786	7.32	1	0.03	9.01	60
0903	20.4	.787	7.35	1	0.03	8.89	78
0904	Sample time						

Comments: Sample time ID - MW-8 - 0904
Duplicate Sample ID - MW-9 - 0806



December 27, 2006

Neil Shukla
Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Subject: Calscience Work Order No.: 06-12-0691
Client Reference: BOU Groundwater Monitoring 2006 / 17653-0604

Dear Client:

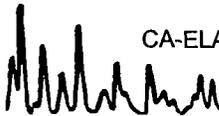
Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/11/2006 and analyzed in accordance with the attached chain-of-custody.

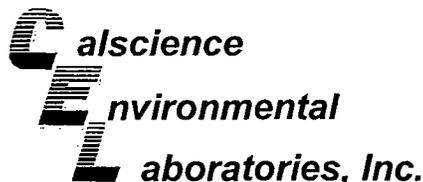
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jason Torres
Project Manager





Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 3005A Filtr. / EPA 7470A Filtr.
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	06-12-0691-2	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-Mercury was analyzed on 12/13/2006 11:07:12 AM with batch 061213L02

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000177	1	
Arsenic	0.00443	0.01000	0.00308	1	J,B	Molybdenum	0.00626	0.00500	0.000800	1	
Barium	0.145	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	0.000181	0.001000	0.000176	1	J	Selenium	0.0183	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00190	0.00500	0.000350	1	J	Thallium	0.00402	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00420	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0728	0.0100	0.000848	1	
Lead	0.0104	0.0100	0.00236	1							

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-7	06-12-0691-3	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-Mercury was analyzed on 12/13/2006 11:09:23 AM with batch 061213L02

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000177	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	0.00613	0.00500	0.000800	1	
Barium	0.150	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	0.0139	0.0150	0.00295	1	J
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00187	0.00500	0.000350	1	J	Thallium	0.00252	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00467	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0118	0.0100	0.000848	1	
Lead	0.00971	0.01000	0.00236	1	J						

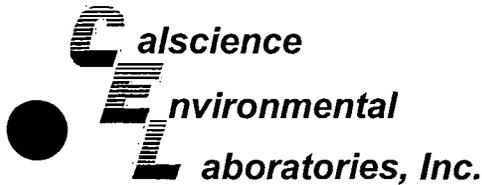
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	06-12-0691-4	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-Mercury was analyzed on 12/13/2006 11:11:35 AM with batch 061213L02

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00273	0.01500	0.00209	1	J,B	Mercury	ND	0.000500	0.0000177	1	
Arsenic	0.00482	0.01000	0.00308	1	J,B	Molybdenum	0.00510	0.00500	0.000800	1	
Barium	0.139	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	0.0172	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00217	0.00500	0.000350	1	J	Thallium	0.00246	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00392	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0254	0.0100	0.000848	1	
Lead	0.00874	0.01000	0.00236	1	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-04-008-2,767	N/A	Aqueous	12/13/06	12/13/06	061213L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

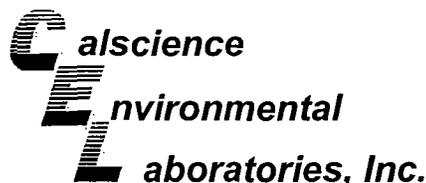
Parameter	Result	RL	MDL	DF	Qual
Mercury	ND	0.000500	0.0000177	1	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-003-6,719	N/A	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00657	0.01500	0.00209	1	J	Lead	ND	0.0100	0.00236	1	
Arsenic	0.00652	0.01000	0.00308	1	J	Molybdenum	ND	0.00500	0.000800	1	
Barium	ND	0.0100	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	ND	0.00500	0.000696	1		Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	ND	0.0100	0.000848	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 3005A Filtr.
Method: EPA 6010B
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	06-12-0691-2	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	101	0.100	0.00932	1		Potassium	5.32	0.50	0.0561	1	
Magnesium	32.2	0.1	0.00328	1		Sodium	37.5	0.5	0.0192	1	

MW-7	06-12-0691-3	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F
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Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	102	0.100	0.00932	1		Potassium	5.25	0.50	0.0561	1	
Magnesium	34.3	0.1	0.00328	1		Sodium	39.5	0.5	0.0192	1	

MW-3	06-12-0691-4	12/11/06	Aqueous	12/13/06	12/14/06	061213L07F
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Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	102	0.100	0.00932	1		Potassium	5.39	0.50	0.0561	1	
Magnesium	31.5	0.1	0.00328	1		Sodium	37.0	0.5	0.0192	1	

Method Blank	097-01-003-6,719	N/A	Aqueous	12/13/06	12/14/06	061213L07F
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Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	ND	0.100	0.00932	1		Potassium	ND	0.500	0.0561	1	
Magnesium	ND	0.100	0.00328	1		Sodium	ND	0.500	0.0192	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 3520B
Method: EPA 8270C(M) Isotope Dilution

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	06-12-0691-2	12/11/06	Aqueous	12/13/06	12/20/06	061213L07

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	2.5	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	86	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-7	06-12-0691-3	12/11/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	82	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	06-12-0691-4	12/11/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

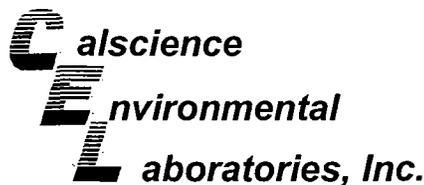
Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	1.4	2.0	0.40	1	J	ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	81	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method:Blank	099-09-004-702	N/A	Aqueous	12/13/06	12/19/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	94	56-123				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TITB121106	06-12-0691-1	12/11/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	8.4	50.0	7.0	1	J,B	1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	0.25	1.00	0.23	1	J,B
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	0.62	10.00	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	135	74-140				1,2-Dichloroethane-d4	140	74-146			
Toluene-d8	103	88-112				1,4-Bromofluorobenzene	75	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

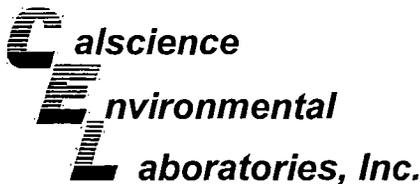
Page 2 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	06-12-0691-2	12/11/06	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	0.64	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	1.1	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	140	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	2.0	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	54	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	1.9	0.5	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	1.1	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	105	74-140				1,2-Dichloroethane-d4	114	74-146			
Toluene-d8	104	88-112				1,4-Bromofluorobenzene	102	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 3 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-7	06-12-0691-3	12/11/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	0.92	1.00	0.29	1	J	1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	22	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	1.6	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	8.8	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	0.84	1.00	0.26	1	J	Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Dibromofluoromethane	138	74-140				1,2-Dichloroethane-d4	145	74-146			
Toluene-d8	104	88-112				1,4-Bromofluorobenzene	75	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

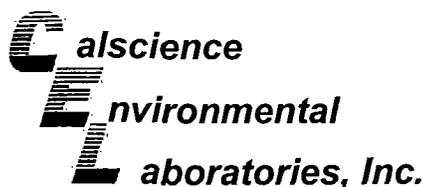
Page 4 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	06-12-0691-4	12/11/06	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
t-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	0.87	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	1.6	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	87	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	2.7	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	27	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	7.0	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	105	74-140				1,2-Dichloroethane-d4	110	74-146			
Toluene-d8	104	88-112				1,4-Bromofluorobenzene	101	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 5 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-19,884	N/A	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	27	50	7.0	1	J	1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	0.46	1.00	0.23	1	J
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.61	1	
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Dibromofluoromethane	125	74-140				1,2-Dichloroethane-d4	123	74-146			
Toluene-d8	100	88-112				1,4-Bromofluorobenzene	80	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report

Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 6 of 6

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-19.902	N/A	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoforn	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
t-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.61	1	
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	120	74-140				1,2-Dichloroethane-d4	123	74-146			
Toluene-d8	96	88-112				1,4-Bromofluorobenzene	100	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

EPA 8260B Tentatively Identified Compound List

<u>Work Order</u>	<u>CEL Sample</u>	<u>Client ID</u>	<u>Q</u> <u>Compound</u>	<u>CAS NUMBER</u>	<u>RT</u>	<u>On Column Conc.</u> <u>ug/L</u>	<u>Estimated Conc.</u> <u>ug/L</u>
06-12-0691			No TICs found for all samples				

Q Qualifier
RT Retention Time



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	06-12-0691-2	12/11/06	Aqueous	12/12/06	12/12/06	061212L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.11	0.02	0.0084	5		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-7	06-12-0691-3	12/11/06	Aqueous	12/12/06	12/12/06	061212L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.013	0.005	0.0017	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	06-12-0691-4	12/11/06	Aqueous	12/12/06	12/12/06	061212L01

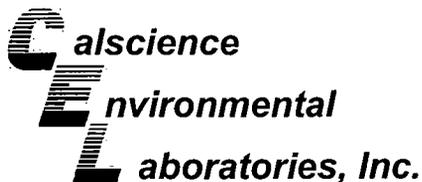
Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.15	0.02	0.0084	5		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-022-293	N/A	Aqueous	12/12/06	12/12/06	061212L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	ND	0.0050	0.0017	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-8	06-12-0691-2	12/11/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	40	10	0.55	10		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	11	1	0.28	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	74	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	12/12/06	EPA 314.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.61	0.01	0.0100	1		mg/L	N/A	12/11/06	SM 4500-O G

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-7	06-12-0691-3	12/11/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	45	10	0.55	10		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	10	1	0.28	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	79	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	12/12/06	EPA 314.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.45	0.01	0.0100	1		mg/L	N/A	12/11/06	SM 4500-O G

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-3	06-12-0691-4	12/11/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	41	10	0.55	10		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	12	1	0.28	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	78	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	12/12/06	EPA 314.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.82	0.01	0.0100	1		mg/L	N/A	12/11/06	SM 4500-O G

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691

Project: BOU Groundwater Monitoring 2006 / 17653-0604

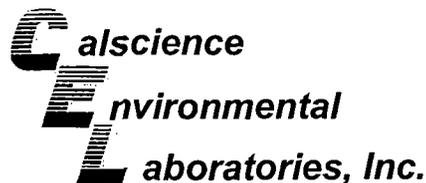
Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method: Blank		N/A	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (1)	ND	1.0	0.055	1		mg/L	N/A	12/11/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/11/06	EPA 300.0
Nitrate (as N) (1)	ND	0.10	0.028	1		mg/L	N/A	12/11/06	EPA 300.0
Sulfate (1)	ND	1.0	0.069	1		mg/L	N/A	12/11/06	EPA 300.0
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	12/12/06	EPA 314.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



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Pasadena, CA 91107-6024

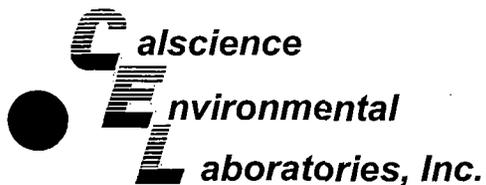
Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0774-5	Aqueous	ICP 3300	12/13/06	12/14/06	061213S07

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	107	107	72-132	1	0-10	
Arsenic	111	108	80-140	2	0-11	
Barium	106	106	87-123	0	0-6	
Beryllium	105	104	89-119	0	0-8	
Cadmium	105	105	82-124	0	0-7	
Chromium	105	104	86-122	1	0-8	
Cobalt	104	104	83-125	0	0-7	
Copper	95	95	78-126	0	0-7	
Lead	105	103	84-120	2	0-7	
Molybdenum	104	103	78-126	1	0-7	
Nickel	102	101	84-120	1	0-7	
Selenium	108	105	79-127	2	0-9	
Silver	104	104	86-128	0	0-7	
Thallium	106	106	79-121	0	0-8	
Vanadium	104	104	88-118	0	0-7	
Zinc	106	106	89-131	0	0-8	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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Pasadena, CA 91107-6024

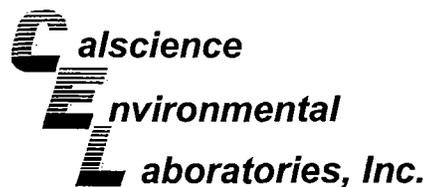
Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 7470A Filt.
Method: EPA 7470A

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	Aqueous	Mercury	12/13/06	12/13/06	061213S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	98	101	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0774-5	Aqueous	GC/MS EE	12/13/06	12/13/06	061213S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	108	88-118	1	0-7	
Carbon Tetrachloride	114	110	67-145	3	0-11	
Chlorobenzene	108	107	88-118	1	0-7	
1,2-Dichlorobenzene	103	103	86-116	1	0-8	
1,1-Dichloroethene	116	113	70-130	2	0-25	
Toluene	112	110	87-123	2	0-8	
Trichloroethene	86	86	79-127	0	0-10	
Vinyl Chloride	112	111	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	105	105	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	82	86	36-168	4	0-45	
Diisopropyl Ether (DIPE)	119	116	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	106	106	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	113	112	72-126	1	0-12	
Ethanol	114	108	53-149	5	0-31	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

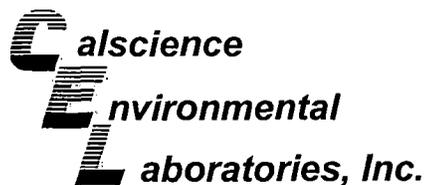
Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0775-2	Aqueous	GC/MS D	12/14/06	12/14/06	061214S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	107	88-118	1	0-7	
Carbon Tetrachloride	105	112	67-145	6	0-11	
Chlorobenzene	108	107	88-118	1	0-7	
1,2-Dichlorobenzene	110	112	86-116	1	0-8	
1,1-Dichloroethene	115	116	70-130	2	0-25	
Toluene	114	108	87-123	5	0-8	
Trichloroethene	108	107	79-127	1	0-10	
Vinyl Chloride	122	124	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	121	123	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	163	161	36-168	1	0-45	
Diisopropyl Ether (DIPE)	110	113	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	111	115	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	116	114	72-126	2	0-12	
Ethanol	124	138	53-149	10	0-31	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received: 12/11/06
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0692-1	Aqueous	GC/MS M	12/12/06	12/12/06	061212S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	111	102	80-120	9	0-20	
1,4-Dioxane	106	102	80-120	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit


Calscience

Environmental
Laboratories, Inc.
Quality Control - Spike/Spike Duplicate


Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received:
Work Order No:

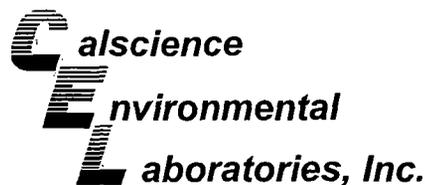
N/A
06-12-0691

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>MS% REC</u>	<u>MSD % REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Chloride	EPA 300.0	06-12-0640-1	12/11/06	N/A	97	96	56-134	1	0-3	
Nitrite (as N)	EPA 300.0	06-12-0640-1	12/11/06	N/A	102	99	68-122	2	0-8	
Nitrate (as N)	EPA 300.0	06-12-0640-1	12/11/06	N/A	95	94	58-142	1	0-6	
Sulfate	EPA 300.0	06-12-0640-1	12/11/06	N/A	98	101	49-133	2	0-3	
Perchlorate	EPA 314.0	06-12-0603-5	12/12/06	N/A	111	111	80-120	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 06-12-0691

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Dissolved Oxygen	SM 4500-O G	MW-3	12/11/06	7.82	7.88	1	0-25	
Sulfide, Total	EPA 376.2	06-12-0774-5	12/13/06	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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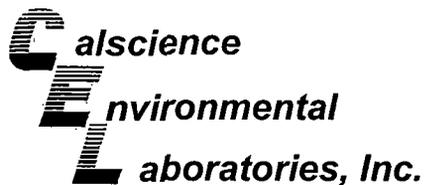
Date Received: N/A
Work Order No: 06-12-0691
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-6,7,19	Aqueous	ICP 3300	12/13/06	12/14/06	061213L07F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	101	102	80-120	1	0-20	
Arsenic	101	102	80-120	1	0-20	
Barium	107	107	80-120	0	0-20	
Beryllium	96	97	80-120	1	0-20	
Cadmium	105	105	80-120	0	0-20	
Chromium	103	102	80-120	0	0-20	
Cobalt	110	110	80-120	0	0-20	
Copper	101	101	80-120	0	0-20	
Lead	105	105	80-120	1	0-20	
Molybdenum	102	102	80-120	0	0-20	
Nickel	107	107	80-120	0	0-20	
Selenium	97	97	80-120	1	0-20	
Silver	99	100	80-120	0	0-20	
Thallium	112	111	80-120	0	0-20	
Vanadium	100	101	80-120	0	0-20	
Zinc	106	105	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

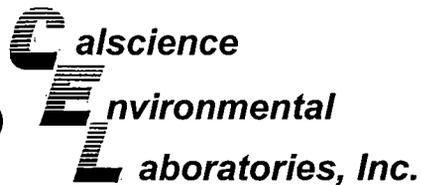
Date Received: N/A
 Work Order No: 06-12-0691
 Preparation: EPA 7470A Filt.
 Method: EPA 7470A

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-2,767	Aqueous	Mercury	12/13/06	12/13/06	061213L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	96	97	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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Pasadena, CA 91107-6024

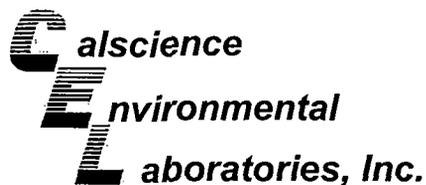
Date Received: N/A
Work Order No: 06-12-0691
Preparation: EPA 3520B
Method: EPA 8270C(M) Isotope Dilution

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-702	Aqueous	GC/MS J	12/13/06	12/19/06	061213L07

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	81	78	50-130	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-19,884	Aqueous	GC/MS-EE	12/13/06	12/13/06	061213L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	105	84-120	3	0-8	
Carbon Tetrachloride	107	113	63-147	6	0-10	
Chlorobenzene	105	108	89-119	3	0-7	
1,2-Dichlorobenzene	103	108	89-119	4	0-9	
1,1-Dichloroethene	106	113	77-125	6	0-16	
Toluene	106	108	83-125	2	0-9	
Trichloroethene	100	104	89-119	3	0-8	
Vinyl Chloride	109	111	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	100	104	82-118	5	0-13	
Tert-Butyl Alcohol (TBA)	90	87	46-154	4	0-32	
Diisopropyl Ether (DIPE)	110	117	81-123	6	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	110	74-122	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	110	76-124	2	0-10	
Ethanol	92	95	60-138	3	0-32	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



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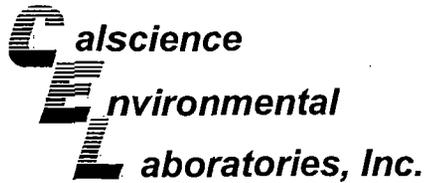
Date Received: N/A
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: EPA 8260B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-19,902	Aqueous	GC/MS/O	12/14/06	12/14/06	061214L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	105	84-120	0	0-8	
Carbon Tetrachloride	112	107	63-147	4	0-10	
Chlorobenzene	106	106	89-119	0	0-7	
1,2-Dichlorobenzene	108	110	89-119	1	0-9	
1,1-Dichloroethene	110	109	77-125	1	0-16	
Toluene	107	110	83-125	3	0-9	
Trichloroethene	109	108	89-119	1	0-8	
Vinyl Chloride	115	115	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	103	102	82-118	1	0-13	
Tert-Butyl Alcohol (TBA)	79	82	46-154	3	0-32	
Diisopropyl Ether (DIPE)	107	105	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	108	108	74-122	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	106	110	76-124	4	0-10	
Ethanol	82	100	60-138	20	0-32	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



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Pasadena, CA 91107-6024

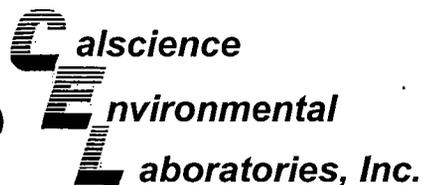
Date Received: N/A
Work Order No: 06-12-0691
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-022-293	Aqueous	GC/MS M	12/12/06	12/12/06	061212L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	100	87	80-120	14	0-20	
1,4-Dioxane	85	81	80-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received:
Work Order No:

N/A
06-12-0691

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control</u> Sample ID	<u>Date</u> Extracted	<u>Date</u> Analyzed	<u>LCS %</u> REC	<u>LCSD %</u> REC	<u>%REC</u> CL	<u>RPD</u>	<u>RPD</u> CL	<u>Qual</u>
Chloride	EPA 300.0	099-05-118-3,703	N/A	12/11/06	99	100	81-111	1	0-5	
Nitrite (as N)	EPA 300.0	099-05-118-3,703	N/A	12/11/06	91	92	73-115	2	0-26	
Nitrate (as N)	EPA 300.0	099-05-118-3,703	N/A	12/11/06	95	96	87-111	1	0-12	
Sulfate	EPA 300.0	099-05-118-3,703	N/A	12/11/06	103	102	89-107	1	0-13	
Perchlorate	EPA 314.0	099-05-203-519	N/A	12/12/06	98	98	85-115	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Work Order Number: 06-12-0691

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



TETRA TECH, INC.
 75 E. FOOTHILL BLVD.
 PASADENA, CALIFORNIA 91107
 TELEPHONE (626) 351-4664
 FAX (626) 351-5291

SHIPPED TO:

CALSCIENCE
7440 LINCOLN WAY
G.G., CA 92841

CHAIN OF CUSTODY RECORD

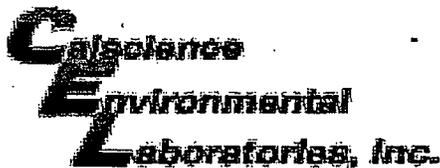
D691

DATE 12-11-06 PAGE 1 OF 1

CLIENT: <u>LOCKHEED MARTIN</u>			EXTRACTION/ANALYTICAL METHODS														TURN-AROUND TIME							
PROJECT NAME: <u>BOLL GROUND WATER</u>			VOCs w/ HHSB (from TIC) (EPA 8260B)	TPS (EPA 100.1) PH (EPA 150.1)	Nitrate (EPA 500.1)	Total Cr (EPA 60105) (Filtered)	1,2,3-TCP (EPA 504.1)	5,2,4,2,1,1-E-Q (MS-P-504)	1,4-Dioxane (EPA 8210C 514)	Perchlorate (EPA 514.0)	Chromium VI (EPA 218.6)	CAM METALS w/ Thallium (EPA 6010B/7000) Filtered	Common Anions w/ Chlorides (EPA 6010/300.0) Filtered	Dissolved Oxygen (EPA 300.1)	Sulfide EPA 300.0	NDMA EPA 1625C	Nitrite (300.1)	MATRIX TYPE	PRESERVATIVE	CONTAINER TYPE	NUMBER OF CONTAINERS	HEADSPACE READINGS (ppm)	OBSERVATIONS / COMMENTS	
SAMPLE NO.	DATE	TIME																					STANDARD	
PROJECT MANAGER: <u>NEIL SHUKLA</u>			PAC well																					
TC #: <u>17653-0604</u>																								
SAMPLERS (SIGNATURES): <u>Tony</u>																								
<u>Tt TB 121106</u>	<u>12/11/06</u>	<u>0750</u>	X															W		6	2	1		
<u>MW-8</u>		<u>0840</u>	X	X	X	X					X	X	X	X	X	X	X	W		g/p	12		2	
<u>MW-7</u>		<u>1025</u>	X	X	X	X					X	X	X	X	X	X	X	W		g/p	12		3	
<u>MW-3</u>		<u>1150</u>	X	X	X	X					X	X	X	X	X	X	X	W		g/p	12		4	
<u>MW-1 T.S.D.</u>			X	X	X	X					X	X	X	X	X	X	X							
<u>MW-11 T.S.D.</u>																								

MATRIX TYPE: S - SOIL, W - WATER, SL - SLUDGE
 CONTAINER TYPES: G - GLASS BOTTLE/VOA, P - PLASTIC, SS - STAINLESS STEEL SLEEVE, BS - BRASS SLEEVE
 PRESERVATIVES: HCL, NR (NONE REQUIRED)
 TEMPERATURE BLANK EACH COOLER: YES NO

RELINQUISHED BY: <u>TOMY KERNHARDT</u>	SIGNATURE: <u>Tomy Kernhardt</u>	COMPANY: <u>TETRA TECH, INC.</u>	DATE: <u>12/11/06</u>	TIME: <u>15:20</u>	TOTAL NUMBER OF CONTAINERS
RECEIVED BY: <u>BAC TA</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>CEC</u>	DATE: <u>12/11/06</u>	TIME: <u>5:20</u>	METHOD OF SHIPMENT: <u>LAB PICK UP</u>
RELINQUISHED BY: <u>BAC TA</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>CEC</u>	DATE: <u>12/11/06</u>	TIME: <u>16:25</u>	SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS
RECEIVED BY: <u>N. CRUISE</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>CEC</u>	DATE: <u>12/11/06</u>	TIME: <u>16:50</u>	AIRBILL NO.:



WORK ORDER #: 06-12-0691

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Tetra Tech

DATE: 12/11/16

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature.

LABORATORY (Other than Calscience Courier):

- C Temperature blank.
C IR thermometer.
Ambient temperature.

3.0 C Temperature blank.

Initial: [Signature]

CUSTODY SEAL INTACT:

Sample(s): Cooler: No (Not Intact): Not Present: Initial: [Signature]

SAMPLE CONDITION:

Table with 4 columns: Item, Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: [Signature]

COMMENTS:

Blank lines for handwritten comments.



December 27, 2006

Neil Shukla
Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Subject: **Calscience Work Order No.: 06-12-0774**
Client Reference: **BOU Groundwater Monitoring 2006 / 17653-0604**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/12/2006 and analyzed in accordance with the attached chain-of-custody.

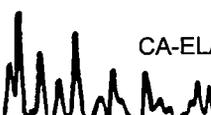
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

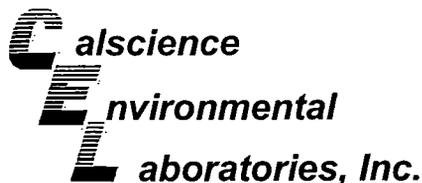
If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.

Jason Torres
Project Manager





Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 3005A Filtr. / EPA 7470A Filtr.
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	06-12-0774-2	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 12/13/2006 4:11:26 PM with batch 061213L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000177	1	
Arsenic	0.00438	0.01000	0.00308	1	J,B	Molybdenum	0.00568	0.00500	0.000800	1	
Barium	0.138	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	0.000184	0.001000	0.000176	1	J	Selenium	0.0158	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00249	0.00500	0.000350	1	J	Thallium	0.00974	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00360	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.00767	0.01000	0.000848	1	J
Lead	0.0110	0.0100	0.00236	1							

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-55	06-12-0774-3	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 12/13/2006 4:13:38 PM with batch 061213L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000177	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	0.00590	0.00500	0.000800	1	
Barium	0.138	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	0.000196	0.001000	0.000176	1	J	Selenium	0.0248	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00253	0.00500	0.000350	1	J	Thallium	0.00680	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00384	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0183	0.0100	0.000848	1	
Lead	0.00884	0.01000	0.00236	1	J						

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	06-12-0774-4	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 12/13/2006 4:15:50 PM with batch 061213L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000177	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	0.00729	0.00500	0.000800	1	
Barium	0.148	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	0.0198	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00203	0.00500	0.000350	1	J	Thallium	0.00939	0.01500	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00448	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0144	0.0100	0.000848	1	
Lead	0.00791	0.01000	0.00236	1	J						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 3005A Filtr. / EPA 7470A Filtr.
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-6	06-12-0774-5	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

-Mercury was analyzed on 12/13/2006 4:18:02 PM with batch 061213L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.000177	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	0.00689	0.00500	0.000800	1	
Barium	0.141	0.010	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	0.000177	0.001000	0.000176	1	J	Selenium	0.0178	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	0.00398	0.00500	0.000350	1	J	Thallium	0.0128	0.0150	0.00233	1	J
Cobalt	ND	0.00500	0.000696	1		Vanadium	0.00376	0.00500	0.000314	1	J
Copper	ND	0.00500	0.00134	1		Zinc	0.0121	0.0100	0.000848	1	
Lead	0.0111	0.0100	0.00236	1							

Method Blank	099-04-008-2,769	N/A	Aqueous	12/13/06	12/13/06	061213L04
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Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

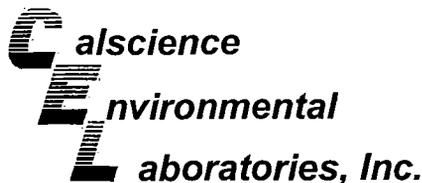
Parameter	Result	RL	MDL	DF	Qual
Mercury	ND	0.000500	0.000177	1	

Method Blank	097-01-003-6,719	N/A	Aqueous	12/13/06	12/14/06	061213L07F
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Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00657	0.01500	0.00209	1	J	Lead	ND	0.0100	0.00236	1	
Arsenic	0.00652	0.01000	0.00308	1	J	Molybdenum	ND	0.00500	0.000800	1	
Barium	ND	0.0100	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	ND	0.00500	0.000696	1		Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	ND	0.0100	0.000848	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 3005A Filt.
Method: EPA 6010B
Units: mg/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	06-12-0774-2	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	103	0.100	0.00932	1		Potassium	5.42	0.50	0.0561	1	
Magnesium	30.1	0.1	0.00328	1		Sodium	36.8	0.5	0.0192	1	

MW-55	06-12-0774-3	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F
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Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	103	0.100	0.00932	1		Potassium	5.59	0.50	0.0561	1	
Magnesium	29.8	0.1	0.00328	1		Sodium	37.1	0.5	0.0192	1	

MW-4	06-12-0774-4	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F
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Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	101	0.100	0.00932	1		Potassium	5.24	0.50	0.0561	1	
Magnesium	33.8	0.1	0.00328	1		Sodium	39.3	0.5	0.0192	1	

MW-6	06-12-0774-5	12/12/06	Aqueous	12/13/06	12/14/06	061213L07F
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Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	105	0.100	0.00932	1		Potassium	5.47	0.50	0.0561	1	
Magnesium	30.3	0.1	0.00328	1		Sodium	37.1	0.5	0.0192	1	

Method Blank	097-01-003-6,719	N/A	Aqueous	12/13/06	12/14/06	061213L07F
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Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Calcium	ND	0.100	0.00932	1		Potassium	ND	0.500	0.0561	1	
Magnesium	ND	0.100	0.00328	1		Sodium	ND	0.500	0.0192	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 3520B
Method: EPA 8270C(M) Isotope Dilution

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	06-12-0774-2	12/12/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	76	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-55	06-12-0774-3	12/12/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	88	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	06-12-0774-4	12/12/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	70	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-6	06-12-0774-5	12/12/06	Aqueous	12/13/06	12/20/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
Nitrobenzene-d5	95	56-123				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-09-004-702	N/A	Aqueous	12/13/06	12/19/06	061213L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,4-Dioxane	ND	2.0	0.40	1		ug/L
Surrogates:	REC (%)	Control Limits			Qual	
benzene-d5	94	56-123				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

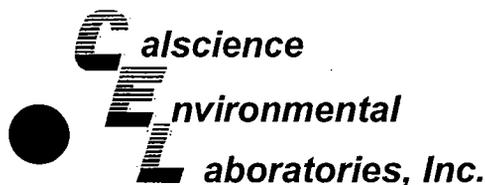
Page 1 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TtTB121206	06-12-0774-1	12/12/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	0.64	10.00	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	0.24	1.00	0.23	1	J,B
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	0.34	1.00	0.26	1	J
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	0.30	1.00	0.29	1	J
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.61	1	
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	127	74-140				1,2-Dichloroethane-d4	135	74-146			
Toluene-d8	101	88-112				1,4-Bromofluorobenzene	78	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 2 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	06-12-0774-2	12/12/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	9.3	50.0	7.0	1	J,B	1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	0.50	1.00	0.21	1	J	t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	2.7	0.5	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	2.5	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	91	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	2.8	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	69	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	6.0	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	125	74-140				1,2-Dichloroethane-d4	137	74-146			
Toluene-d8	102	88-112				1,4-Bromofluorobenzene	75	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 3 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-55	06-12-0774-3	12/12/06	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	9.2	50.0	7.0	1	J	1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	1.9	0.5	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	1.9	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	110	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	1.8	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	57	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	4.6	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Dibromofluoromethane	107	74-140				1,2-Dichloroethane-d4	112	74-146			
Toluene-d8	104	88-112				1,4-Bromofluorobenzene	103	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

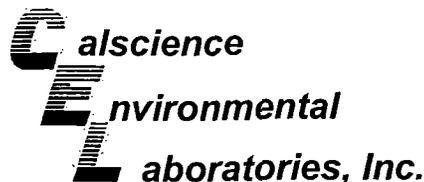
Page 4 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	06-12-0774-4	12/12/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
t-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	0.45	0.50	0.29	1	J	n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	1.1	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	25	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	0.23	1.00	0.23	1	J,B
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	1.3	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	11	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	1.3	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	129	74-140				1,2-Dichloroethane-d4	137	74-146			
Toluene-d8	103	88-112				1,4-Bromofluorobenzene	75	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 5 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-6	06-12-0774-5	12/12/06	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	0.30	1.00	0.21	1	J	t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	2.9	0.5	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	2.6	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethane	80	1	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	0.51	1.00	0.35	1	J
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	2.0	10.0	0.61	1	J
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	57	1	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	3.2	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
Dibromofluoromethane	129	74-140				1,2-Dichloroethane-d4	136	74-146			
Toluene-d8	103	88-112				1,4-Bromofluorobenzene	76	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

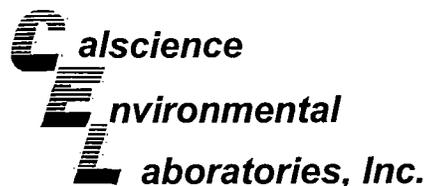
Page 6 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-19,884	N/A	Aqueous	12/13/06	12/13/06	061213L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	27	50	7.0	1	J	1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	0.46	1.00	0.23	1	J
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.61	1	
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
Dibromofluoromethane	125	74-140				1,2-Dichloroethane-d4	123	74-146			
Toluene-d8	100	88-112				1,4-Bromofluorobenzene	80	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 7 of 7

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-19,902	N/A	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

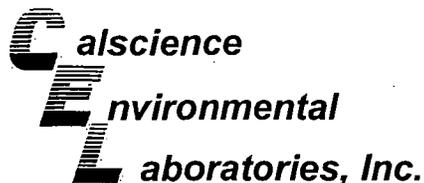
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Acetone	ND	50	7.0	1		1,3-Dichloropropane	ND	1.0	0.28	1	
Benzene	ND	0.50	0.19	1		2,2-Dichloropropane	ND	1.0	0.29	1	
Bromobenzene	ND	1.0	0.26	1		1,1-Dichloropropene	ND	1.0	0.62	1	
Bromochloromethane	ND	1.0	0.88	1		c-1,3-Dichloropropene	ND	0.50	0.28	1	
Bromodichloromethane	ND	1.0	0.21	1		t-1,3-Dichloropropene	ND	0.50	0.26	1	
Bromoform	ND	1.0	0.87	1		Ethylbenzene	ND	1.0	0.13	1	
Bromomethane	ND	10	3.5	1		2-Hexanone	ND	10	3.4	1	
2-Butanone	ND	10	8.0	1		Isopropylbenzene	ND	1.0	0.10	1	
n-Butylbenzene	ND	1.0	0.25	1		p-Isopropyltoluene	ND	1.0	0.14	1	
sec-Butylbenzene	ND	1.0	0.29	1		Methylene Chloride	ND	10	9.7	1	
tert-Butylbenzene	ND	1.0	0.19	1		4-Methyl-2-Pentanone	ND	10	2.0	1	
Carbon Disulfide	ND	10	1.8	1		Naphthalene	ND	10	0.42	1	
Carbon Tetrachloride	ND	0.50	0.29	1		n-Propylbenzene	ND	1.0	0.12	1	
Chlorobenzene	ND	1.0	0.16	1		Styrene	ND	1.0	0.16	1	
Chloroethane	ND	1.0	0.70	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.44	1	
Chloroform	ND	1.0	0.29	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.45	1	
Chloromethane	ND	10	2.1	1		Tetrachloroethene	ND	1.0	0.30	1	
2-Chlorotoluene	ND	1.0	0.16	1		Toluene	ND	1.0	0.23	1	
4-Chlorotoluene	ND	1.0	0.18	1		1,2,3-Trichlorobenzene	ND	1.0	0.26	1	
Dibromochloromethane	ND	1.0	0.39	1		1,2,4-Trichlorobenzene	ND	1.0	0.29	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	3.1	1		1,1,1-Trichloroethane	ND	1.0	0.35	1	
1,2-Dibromoethane	ND	1.0	0.41	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.61	1	
Dibromomethane	ND	1.0	0.82	1		1,1,2-Trichloroethane	ND	1.0	0.79	1	
1,2-Dichlorobenzene	ND	1.0	0.15	1		Trichloroethene	ND	1.0	0.31	1	
1,3-Dichlorobenzene	ND	1.0	0.15	1		Trichlorofluoromethane	ND	10	0.83	1	
1,4-Dichlorobenzene	ND	1.0	0.17	1		1,2,3-Trichloropropane	ND	5.0	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.33	1		1,2,4-Trimethylbenzene	ND	1.0	0.13	1	
1,1-Dichloroethane	ND	1.0	0.25	1		1,3,5-Trimethylbenzene	ND	1.0	0.86	1	
1,2-Dichloroethane	ND	0.50	0.25	1		Vinyl Acetate	ND	10	6.4	1	
1,1-Dichloroethene	ND	1.0	0.26	1		Vinyl Chloride	ND	0.50	0.24	1	
c-1,2-Dichloroethene	ND	1.0	0.63	1		p/m-Xylene	ND	1.0	0.27	1	
t-1,2-Dichloroethene	ND	1.0	0.83	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dichloropropane	ND	1.0	0.55	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.23	1	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
Dibromofluoromethane	120	74-140				1,2-Dichloroethane-d4	123	74-146			
Toluene-d8	96	88-112				1,4-Bromofluorobenzene	100	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

EPA 8260B Tentatively Identified Compound List

<u>Work Order</u>	<u>CEL Sample</u>	<u>Client ID</u>	<u>Q</u>	<u>Compound</u>	<u>CAS NUMBER</u>	<u>RT</u>	<u>On Column Conc.</u> <u>ug/L</u>	<u>Estimated Conc.</u> <u>ug/L</u>
06-12-0774				No TICs found for all samples				

Q Qualifier
RT Retention Time



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	06-12-0774-2	12/12/06	Aqueous	12/14/06	12/14/06	061214L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.18	0.01	0.0033	2		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-55	06-12-0774-3	12/12/06	Aqueous	12/14/06	12/14/06	061214L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.19	0.02	0.0084	5		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	06-12-0774-4	12/12/06	Aqueous	12/14/06	12/14/06	061214L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.020	0.005	0.0017	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-6	06-12-0774-5	12/12/06	Aqueous	12/15/06	12/15/06	061215L01

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	0.14	0.02	0.0084	5		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-022-294	N/A	Aqueous	12/14/06	12/14/06	061214L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	ND	0.0050	0.0017	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-022-295	N/A	Aqueous	12/15/06	12/15/06	061215L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
1,2,3-Trichloropropane	ND	0.0050	0.0017	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-5	06-12-0774-2	12/12/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	39	5	0.27	5		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	12	0.50	0.14	5		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	76	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.02	0.01		1		mg/L	N/A	12/12/06	SM 4500-O G

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-55	06-12-0774-3	12/12/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

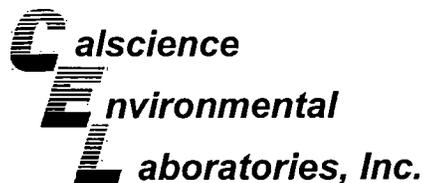
Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	38	5	0.27	5		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	12	0.50	0.14	5		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	78	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	6.76	0.01		1		mg/L	N/A	12/12/06	SM 4500-O G

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-4	06-12-0774-4	12/12/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	46	5	0.27	5		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	11	0.50	0.14	5		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	80	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.35	0.01		1		mg/L	N/A	12/12/06	SM 4500-O G

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



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Date Received: 12/12/06
Work Order No: 06-12-0774

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-6	06-12-0774-5	12/12/06	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride	42	5	0.27	5		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N)	11	0.50	0.14	5		mg/L	N/A	12/12/06	EPA 300.0
Sulfate	78	10	0.69	10		mg/L	N/A	12/12/06	EPA 300.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2
Dissolved Oxygen	7.05	0.01		1		mg/L	N/A	12/12/06	SM 4500-O G

Method Blank	N/A	Aqueous
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Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chloride (1)	ND	1.0	0.055	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrite (as N) (1)	ND	0.10	0.015	1		mg/L	N/A	12/12/06	EPA 300.0
Nitrate (as N) (1)	ND	0.10	0.028	1		mg/L	N/A	12/12/06	EPA 300.0
Sulfate (1)	ND	1.0	0.069	1		mg/L	N/A	12/12/06	EPA 300.0
Sulfide, Total (1)	ND	0.050	0.042	1		mg/L	N/A	12/13/06	EPA 376.2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

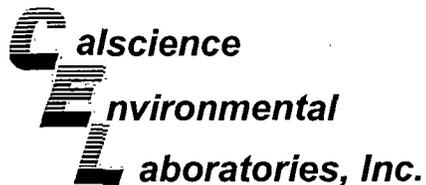
Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	ICP 3300	12/13/06	12/14/06	061213S07

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	107	107	72-132	1	0-10	
Arsenic	111	108	80-140	2	0-11	
Barium	106	106	87-123	0	0-6	
Beryllium	105	104	89-119	0	0-8	
Cadmium	105	105	82-124	0	0-7	
Chromium	105	104	86-122	1	0-8	
Cobalt	104	104	83-125	0	0-7	
Copper	95	95	78-126	0	0-7	
Lead	105	103	84-120	2	0-7	
Molybdenum	104	103	78-126	1	0-7	
Nickel	102	101	84-120	1	0-7	
Selenium	108	105	79-127	2	0-9	
Silver	104	104	86-128	0	0-7	
Thallium	106	106	79-121	0	0-8	
Vanadium	104	104	88-118	0	0-7	
Zinc	106	106	89-131	0	0-8	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 7470A Filtr.
Method: EPA 7470A

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	Mercury	12/13/06	12/13/06	061213S04

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	115	117	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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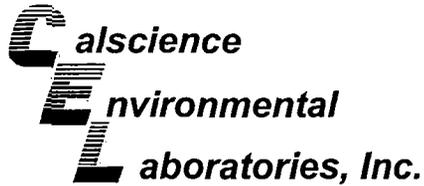
Date Received: 12/12/06
 Work Order No: 06-12-0774
 Preparation: EPA 3520B
 Method: EPA 8270C(M)
 Isotope Dilution

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	GC/MS J	12/13/06	12/22/06	061213S07

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	91	89	50-130	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



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Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	GC/MS EE	12/13/06	12/13/06	061213S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	108	88-118	1	0-7	
Carbon Tetrachloride	114	110	67-145	3	0-11	
Chlorobenzene	108	107	88-118	1	0-7	
1,2-Dichlorobenzene	103	103	86-116	1	0-8	
1,1-Dichloroethene	116	113	70-130	2	0-25	
Toluene	112	110	87-123	2	0-8	
Trichloroethene	86	86	79-127	0	0-10	
Vinyl Chloride	112	111	69-129	1	0-13	
Methyl-t-Butyl Ether (MTBE)	105	105	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	82	86	36-168	4	0-45	
Diisopropyl Ether (DIPE)	119	116	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	106	106	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	113	112	72-126	1	0-12	
Ethanol	114	108	53-149	5	0-31	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

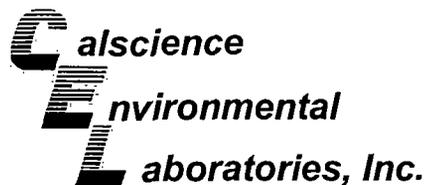
Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0775-2	Aqueous	GC/MS O	12/14/06	12/14/06	061214S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	107	88-118	1	0-7	
Carbon Tetrachloride	105	112	67-145	6	0-11	
Chlorobenzene	108	107	88-118	1	0-7	
1,2-Dichlorobenzene	110	112	86-116	1	0-8	
1,1-Dichloroethene	115	116	70-130	2	0-25	
Toluene	114	108	87-123	5	0-8	
Trichloroethene	108	107	79-127	1	0-10	
Vinyl Chloride	122	124	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	121	123	71-131	2	0-13	
Tert-Butyl Alcohol (TBA)	163	161	36-168	1	0-45	
Diisopropyl Ether (DIPE)	110	113	81-123	3	0-9	
Ethyl-t-Butyl Ether (ETBE)	111	115	72-126	3	0-12	
Tert-Amyl-Methyl Ether (TAME)	116	114	72-126	2	0-12	
Ethanol	124	138	53-149	10	0-31	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 12/12/06
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-12-0855-4	Aqueous	GC/MS M	12/14/06	12/14/06	061214S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
1,2,3-Trichloropropane	88	86	80-120	2	0-20	
1,4-Dioxane	87	101	80-120	15	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
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 Pasadena, CA 91107-6024

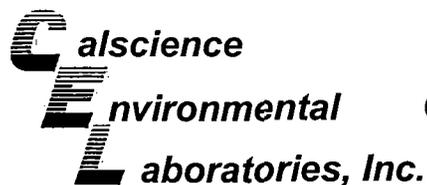
Date Received: 12/12/06
 Work Order No: 06-12-0774
 Preparation: EPA 5030B
 Method: SRL 524M-TCP

Project BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	GC/MS M	12/15/06	12/15/06	061215S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	95	86	80-120	4	0-20	
1,4-Dioxane	97	84	80-120	14	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 06-12-0774

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>MS% REC</u>	<u>MSD % REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Chloride	EPA 300.0	MW-6	12/12/06	N/A	99	99	56-134	0	0-3	
Nitrite (as N)	EPA 300.0	MW-6	12/12/06	N/A	95	100	68-122	5	0-8	
Nitrate (as N)	EPA 300.0	MW-6	12/12/06	N/A	98	98	58-142	0	0-6	
Sulfate	EPA 300.0	MW-6	12/12/06	N/A	102	103	49-133	1	0-3	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Duplicate



Tetra Tech, Inc.
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 Pasadena, CA 91107-6024

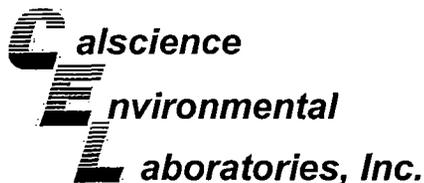
Date Received: N/A
 Work Order No: 06-12-0774

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Dissolved Oxygen	SM 4500-O G	MW-6	12/12/06	7.05	7.28	3	0-25	
Sulfide, Total	EPA 376.2	MW-6	12/13/06	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 06-12-0774
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-6,719	Aqueous	ICP 3300	12/13/06	12/14/06	061213L07F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	101	102	80-120	1	0-20	
Arsenic	101	102	80-120	1	0-20	
Barium	107	107	80-120	0	0-20	
Beryllium	96	97	80-120	1	0-20	
Cadmium	105	105	80-120	0	0-20	
Chromium	103	102	80-120	0	0-20	
Cobalt	110	110	80-120	0	0-20	
Copper	101	101	80-120	0	0-20	
Lead	105	105	80-120	1	0-20	
Molybdenum	102	102	80-120	0	0-20	
Nickel	107	107	80-120	0	0-20	
Selenium	97	97	80-120	1	0-20	
Silver	99	100	80-120	0	0-20	
Thallium	112	111	80-120	0	0-20	
Vanadium	100	101	80-120	0	0-20	
Zinc	106	105	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

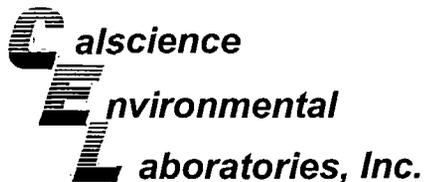
Date Received: N/A
 Work Order No: 06-12-0774
 Preparation: EPA 7470A Filtr.
 Method: EPA 7470A

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-2,769	Aqueous	Mercury	12/13/06	12/13/06	061213L04

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	110	110	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

Date Received: N/A
 Work Order No: 06-12-0774
 Preparation: EPA 3520B
 Method: EPA 8270C(M) Isotope Dilution

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-702	Aqueous	GC/MS J	12/13/06	12/19/06	061213L07

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	81	78	50-130	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
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Pasadena, CA 91107-6024

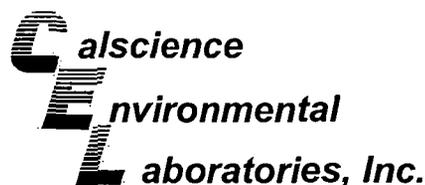
Date Received: N/A
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-19,884	Aqueous	GC/MS EE	12/13/06	12/13/06	061213L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	105	84-120	3	0-8	
Carbon Tetrachloride	107	113	63-147	6	0-10	
Chlorobenzene	105	108	89-119	3	0-7	
1,2-Dichlorobenzene	103	108	89-119	4	0-9	
1,1-Dichloroethene	106	113	77-125	6	0-16	
Toluene	106	108	83-125	2	0-9	
Trichloroethene	100	104	89-119	3	0-8	
Vinyl Chloride	109	111	63-135	1	0-13	
Methyl-t-Butyl Ether (MTBE)	100	104	82-118	5	0-13	
Tert-Butyl Alcohol (TBA)	90	87	46-154	4	0-32	
Diisopropyl Ether (DIPE)	110	117	81-123	6	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	110	74-122	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	107	110	76-124	2	0-10	
Ethanol	92	95	60-138	3	0-32	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

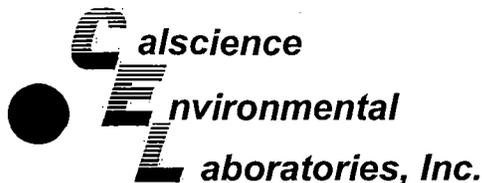
Date Received: N/A
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: EPA 8260B

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-19,902	Aqueous	GC/MS O	12/14/06	12/14/06	061214L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	105	84-120	0	0-8	
Carbon Tetrachloride	112	107	63-147	4	0-10	
Chlorobenzene	106	106	89-119	0	0-7	
1,2-Dichlorobenzene	108	110	89-119	1	0-9	
1,1-Dichloroethene	110	109	77-125	1	0-16	
Toluene	107	110	83-125	3	0-9	
Trichloroethene	109	108	89-119	1	0-8	
Vinyl Chloride	115	115	63-135	0	0-13	
Methyl-t-Butyl Ether (MTBE)	103	102	82-118	1	0-13	
Tert-Butyl Alcohol (TBA)	79	82	46-154	3	0-32	
Diisopropyl Ether (DIPE)	107	105	81-123	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	108	108	74-122	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	106	110	76-124	4	0-10	
Ethanol	82	100	60-138	20	0-32	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

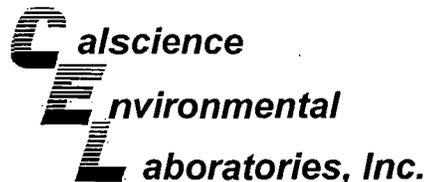
Date Received: N/A
 Work Order No: 06-12-0774
 Preparation: EPA 5030B
 Method: SRL 524M-TCP

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-022-294	Aqueous	GC/MS M	12/14/06	12/14/06	061214L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	116	118	80-120	2	0-20	
1,4-Dioxane	94	98	80-120	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 06-12-0774
Preparation: EPA 5030B
Method: SRL 524M-TCP

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-022-295	Aqueous	GC/MS M	12/15/06	12/15/06	061215L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	84	84	80-120	1	0-20	
1,4-Dioxane	95	89	80-120	7	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

Date Received:
 Work Order No:

N/A
 06-12-0774

Project: BOU Groundwater Monitoring 2006 / 17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control</u> Sample ID	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Analyzed</u>	<u>LCS %</u> <u>REC</u>	<u>LCSD %</u> <u>REC</u>	<u>%REC</u> <u>CL</u>	<u>RPD</u>	<u>RPD</u> <u>CL</u>	<u>Qual</u>
Chloride	EPA 300.0	099-05-118-3,706	N/A	12/12/06	99	98	81-111	0	0-5	
Nitrite (as N)	EPA 300.0	099-05-118-3,706	N/A	12/12/06	90	92	73-115	2	0-26	
Nitrate (as N)	EPA 300.0	099-05-118-3,706	N/A	12/12/06	96	95	87-111	0	0-12	
Sulfate	EPA 300.0	099-05-118-3,706	N/A	12/12/06	98	102	89-107	4	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Work Order Number: 06-12-0774

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



TETRA TECH, INC.
 3475 E. FOOTHILL BLVD.
 PASADENA, CALIFORNIA 91107
 TELEPHONE (626) 351-4664
 FAX (626) 351-5291

SHIPPED TO:

CALSCIENCE
7440 LINCOLN WAY
G.G., CA 92841

CHAIN OF CUSTODY RECORD

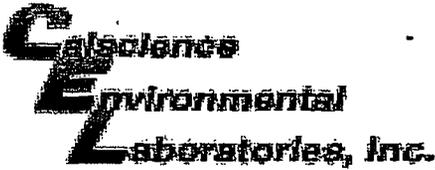
0774

DATE 12/12/06 PAGE 1 OF 1

CLIENT: <u>LOCKHEED MARTIN</u>			EXTRACTION/ANALYTICAL METHODS													TURN-AROUND TIME								
PROJECT NAME: <u>BOLL GROUND WATER</u>			VOCs w/MTBE/FRM/TIC (EPA 8160B)	TDS (EPA 160.1)	PH (EPA 150.1)	Nitrate (EPA 500.1)	Total Cr (EPA 60105 (Filtered))	1,2,3-TCP (EPA 504.1)	5,2,4,2,1,1,6-DCMS (EPA 514.0)	1,4-Dioxane (EPA 8270C 514)	Perchlorate (EPA 514.0)	Chromium IV (EPA 218.6)	CAM METALS/Thallium (EPA 6010B/7000) Filtered	Common Anions (EPA 6010/300.0) Filtered	Dissolved Oxygen (EPA 300.1)	Sulfide EPA 300.0	NDMA EPA 1625C	MATRIX TYPE	PRESERVATIVE	CONTAINER TYPE	NUMBER OF CONTAINERS	HEADSPACE READINGS (ppm)	STANDARD	
PROJECT MANAGER: <u>NEIL SHUKLA</u>																								
TC #: <u>17653-0604</u>																								
SAMPLERS (SIGNATURES)																								
SAMPLE NO.	DATE	TIME																						
<u>TT TB 121206</u>	<u>12/12/06</u>	<u>0705</u>	X															W	HCl	G	2			
<u>MW-5</u>		<u>0904</u>	X	X	X	X	X	X					X	X	X	X		W	HCl	Gp	n		<u>Nitrite</u>	
<u>MW-55</u>		<u>0950</u>	X	X	X	X	X	X					X	X	X	X		W	HCl	Gp	n		<u>Nitrite</u>	
<u>MW-4</u>		<u>1041</u>	X		X	X	X	X					X	X	X	X		W	HCl	Gp	n		<u>Nitrite</u>	
<u>MW-6</u>		<u>1141</u>	X		X	X	X	X					X	X	X	X		W	HCl	Gp	36		<u>MS/MSD nitrite</u>	
<u>MW-6</u>																								

MATRIX TYPE: S - SOIL, W - WATER, SL - SLUDGE
 CONTAINER TYPES: G - GLASS BOTTLE/VOA, P - PLASTIC, SS - STAINLESS STEEL SLEEVE, BS - BRASS SLEEVE
 PRESERVATIVES: HCL, NR (NONE REQUIRED)
 TEMPERATURE BLANK EACH COOLER: YES NO

RELINQUISHED BY <u>Norman Ng</u>	SIGNATURE <u>[Signature]</u>	TETRA TECH, INC.	DATE <u>12/12/06</u>	TIME <u>14:45</u>	TOTAL NUMBER OF CONTAINERS
RECEIVED BY <u>B KRISTIANO</u>	SIGNATURE <u>[Signature]</u>	COMPANY <u>CALSCIENCE LABS</u>	DATE <u>12/12/06</u>	TIME <u>14:45</u>	METHOD OF SHIPMENT
RELINQUISHED BY <u>B KRISTIANO</u>	SIGNATURE <u>[Signature]</u>	COMPANY <u>CEL</u>	DATE <u>12/12/06</u>	TIME <u>17:45</u>	SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS
RECEIVED BY <u>N Cruise</u>	SIGNATURE <u>[Signature]</u>	COMPANY <u>CEL</u>	DATE <u>12/12/06</u>	TIME <u>17:45</u>	AIRBILL NO: _____



WORK ORDER #: 06-12-0774

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Tetra Tech

DATE: 12/12/06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
- Chilled, cooler without temperature blank.
- Chilled and placed in cooler with wet ice.
- Ambient and placed in cooler with wet ice.
- Ambient temperature.

3, 2 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- °C Temperature blank.
- °C IR thermometer.
- Ambient temperature.

Initial: RS

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present:

Initial: RS

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: RS

COMMENTS:

Only received 11 containers for (-3) MW55, missing one 250mL poly w/ HNO3 (received 1 of 2)



January 10, 2007

Robert Sabatar
Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Subject: Calscience Work Order No.: 07-01-0388
Client Reference: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/8/2007 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jason Torres
Project Manager

Case Narrative for 07-01-0388

Provided below is a narrative of our analytical effort for N-Nitrosodimethylamine (NDMA) analysis by EPA 1625C(M), including any unique features or anomalies encountered during analysis of the samples.

Sample Condition on Receipt

Four aqueous samples were received as part of this Work Order on January 08, 2007. The samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature (3.2°C) of the samples was measured upon arrival in the laboratory and was within acceptable limits. The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

Data Summary (NDMA analysis only)Holding Times

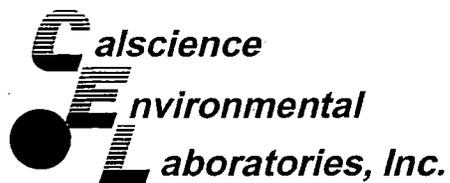
All holding time requirements were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

The method blank data showed non-detectable levels for all constituents.



Case Narrative for 07-01-0388

Laboratory Control Samples

The Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) analyses were performed at the required frequencies. All recoveries were within acceptable limits.

Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

Analytical Report



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

Date Received: 01/08/07
 Work Order No: 07-01-0388
 Preparation: EPA 3520B
 Method: EPA 1625CM

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-5	07-01-0388-1	01/08/07	Aqueous	01/08/07	01/10/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	51	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	07-01-0388-2	01/08/07	Aqueous	01/08/07	01/10/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	64	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-6	07-01-0388-3	01/08/07	Aqueous	01/08/07	01/10/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	54	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	07-01-0388-4	01/08/07	Aqueous	01/08/07	01/10/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	58	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-027-304	N/A	Aqueous	01/08/07	01/09/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	130	50-130				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 01/08/07
Work Order No: 07-01-0388

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-5	07-01-0388-1	01/08/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.9	0.2	0.0050	1	B	ug/L	N/A	01/08/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/08/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-4	07-01-0388-2	01/08/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.6	0.2	0.0050	1	B	ug/L	N/A	01/08/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/08/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-6	07-01-0388-3	01/08/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	3.2	0.2	0.0050	1	B	ug/L	N/A	01/08/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/08/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-3	07-01-0388-4	01/08/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

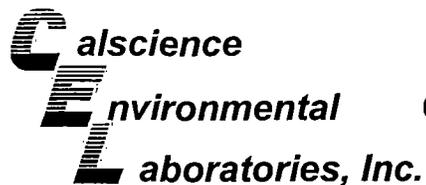
Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.8	0.2	0.0050	1	B	ug/L	N/A	01/08/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/08/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		N/A	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent (1)	0.15	0.20	0.0050	1	J	ug/L	N/A	01/08/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/08/07	EPA 314.0

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received:
Work Order No:

N/A
07-01-0388

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control</u> <u>Sample ID</u>	<u>Date</u> <u>Analyzed</u>	<u>Date</u> <u>Extracted</u>	<u>MS%</u> <u>REC</u>	<u>MSD %</u> <u>REC</u>	<u>%REC</u> <u>CL</u>	<u>RPD</u>	<u>RPD</u> <u>CL</u>	<u>Qualifiers</u>
Chromium, Hexavalent	EPA 218.6	MW-5	01/08/07	N/A	120	118	85-121	1	0-4	
Perchlorate	EPA 314.0	MW-4	01/08/07	N/A	99	101	80-120	1	0-15	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

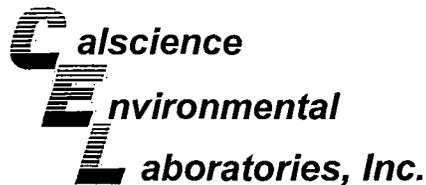
Date Received: N/A
 Work Order No: 07-01-0388
 Preparation: EPA 3520B
 Method: EPA 1625CM

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-027-304	Aqueous	GC/MS H	01/08/07	01/09/07	070108E16

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
N-Nitrosodimethylamine	60	50	50-130	17	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received:
Work Order No:

N/A
07-01-0388

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control</u> Sample ID	<u>Date</u> Extracted	<u>Date</u> Analyzed	<u>LCS %</u> REC	<u>LCSD %</u> REC	<u>%REC</u> CL	<u>RPD</u>	<u>RPD</u> CL	<u>Qual</u>
Chromium, Hexavalent	EPA 218.6	099-05-124-572	N/A	01/08/07	104	105	95-107	1	0-20	
Perchlorate	EPA 314.0	099-05-203-532	N/A	01/08/07	91	92	85-115	1	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Glossary of Terms and Qualifiers



Work Order Number: 07-01-0388

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



TETRA TECH, INC.
 3475 E. FOOTHILL BLVD.
 PASADENA, CALIFORNIA 91107
 TELEPHONE (626) 351-4664
 FAX (626) 351-5291

SHIPPED TO: CALSCIENCE
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

CHAIN OF CUSTODY RECORD

DATE 01/08/07 PAGE 1 OF 1

0388

CLIENT: LOCKHEED MARTIN			EXTRACTION/ANALYTICAL METHODS													TURN-AROUND TIME								
PROJECT NAME: BOU QUARTERLY GW MONITORING			VOCs w/MTBE/From/Trics (EPA 8160E)	TPS (EPA 160.1)	PH (EPA 150.1)	Nitrate (EPA 500.1)	Total Cr (EPA 60105 (Filtered))	1,2,3-TCP (EPA 504.1)	5,2,2,4,4E-DCMST-5 (EPA 504.1)	1,4-Dioxane (EPA 8270C.511)	Perchlorate (EPA 514.9)	Chromium VI (EPA 218.6)	CAM METALS w/Thallium (EPA 6005/7000) Filtered	Common Anions w/Arsenic (EPA 600.0) Filtered	Dissolved Oxygen (EPA 360.1)	Sulfide EPA 300.0	NDMA EPA 1625C	MATRIX TYPE	PRESERVATIVE	CONTAINER TYPE	NUMBER OF CONTAINERS	HEADSPACE READINGS (ppm)	STANDARD	
PROJECT MANAGER: Robert Sabator																							OBSERVATIONS /COMMENTS	
TC #: 17653-0604																								
SAMPLERS (SIGNATURES): <i>[Signature]</i>																								
SAMPLE NO.	DATE	TIME														MATRIX TYPE	PRESERVATIVE	CONTAINER TYPE	NUMBER OF CONTAINERS	HEADSPACE READINGS (ppm)				
MW-5	01/08/07	0926																X	W	Y	G/P	3		
MW-4	01/08/07	1058																X	W	Y	G/P	3		
MW-6	01/08/07	1240																X	W	Y	G/P	3		
MW-3	01/08/07	1428																X	W	Y	G/P	3		

Send lab result to Robert Sabator

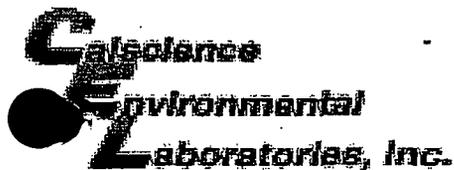
MATRIX TYPE:
 S - SOIL
 W - WATER
 SL - SLUDGE

CONTAINER TYPES:
 G - GLASS BOTTLE/VOA
 P - PLASTIC
 SS - STAINLESS STEEL SLEEVE
 BS - BRASS SLEEVE

PRESERVATIVES: HCL
 NR (NONE REQUIRED)

TEMPERATURE BLANK YES NO
 EACH COOLER

RELINQUISHED BY: <i>Norman Ng</i>	SIGNATURE: <i>[Signature]</i>	COMPANY: TETRA TECH, INC.	DATE: 1/8/07	TIME: 1507	TOTAL NUMBER OF CONTAINERS: 12
RECEIVED BY: <i>Martin Monaro</i>	SIGNATURE: <i>MARTIN MONARO</i>	COMPANY: CAL SCIENCE	DATE: 1/8/07	TIME: 15:07	METHOD OF SHIPMENT: LAB PICK UP
RELINQUISHED BY: <i>MARTIN MONARO</i>	SIGNATURE: <i>[Signature]</i>	COMPANY: CAL SCIENCE	DATE: 1/8/07	TIME: 1622	SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS:
RECEIVED BY: <i>William Batw</i>	SIGNATURE: <i>[Signature]</i>	COMPANY: <i>[Signature]</i>	DATE: 1-8-07	TIME: 1622	AIRBILL NO.:



WORK ORDER #: **07** - -

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TETRA TECH

DATE: 1-8-07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
- Chilled, cooler without temperature blank.
- Chilled and placed in cooler with wet ice.
- Ambient and placed in cooler with wet ice.
- Ambient temperature.

LABORATORY (Other than Calscience Courier):

- °C Temperature blank.
- °C IR thermometer.
- Ambient temperature.

3.2 °C Temperature blank.

Initial: MP

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____

Not Present:

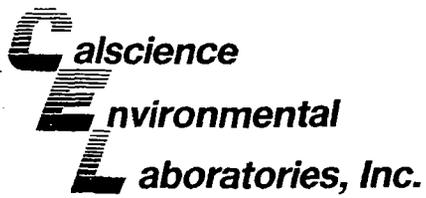
Initial: MP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: MP

COMMENTS:

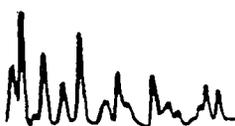


EPA 1625C(M) NDMA

Tetra Tech, Inc.

CEL #07-01-0388

Lockheed Martin BOU Quarterly GW
Monitoring/17653-0604



Batch Number:

Page 13	Start	pH Adjust	End	Matrix	Extraction	Client Name	Analysis	Work Order Number	Sample		Solvent			Who	Comment
	D=Date	D=Date	D=Date	S=Soil	1=3510 Sep				Initial	Final	Lot	Name/	Volume		
	T=Time	T=Time	T=Time	A=Aqueous	2=3520 C-LL				(g/mL)	(mL)	Number	Symbol	(mL)		
D) 1-8-07			D) 1-9-07	S (A) O	1 2 4	ENVENT	16x cm	07-01-0382-2S	1040	1	204662	Co/KL	350	ml	pm 6-8
T) 8:30			T) 11:30	S A O	5 8	TT		07-01-0388-1B	1040						
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S (A) O	1 2 4										
T)			T)	S A O	5 8										
D) 1-9-07			D) 1-10-07	S (A) O	1 2 4	TT	16x cm	07-01-0477-1B	1040						
T) 6:30			T) 12:30	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4	ENVIRON									
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S (A) O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										
D)			D)	S A O	1 2 4										
T)			T)	S A O	5 8										

Reviewed by: _____ Date: ____/____/____

Injection Log

Directory: C:\MSDCHEM1\DATA\061201

FileNo	FileName	Multiplier	SampleName	Misc Info	Injected
1	01DEC012.D	1.	NDMA 20PPB S092106H		1 Dec 2006 15:33
2	01DEC014.D	1.	NDMA 10PPB S092106J		1 Dec 2006 16:24
3	01DEC015.D	1.	NDMA 2PPB S092106K		1 Dec 2006 16:51
4	01DEC016.D	1.	NDMA 50PPB S092106G		1 Dec 2006 17:16
5	01DEC017.D	1.	NDMA 100PPB S092106F		1 Dec 2006 17:42
8	01DEC020.D	1.	NDMA 20-ICV S120106A		1 Dec 2006 19:01

1/16/06

1
2
3
4
5
6

Response Report Report 010001.H

Sample Name: C:\MSDCHEM\1\METHODS\NBRAD012\010001.H (NTE) (Integration)
 File Name: 010001.D
 Last Update: Mon Dec 04 09:54:54 2006
 Response via: Internal Calibration

Calibration Files

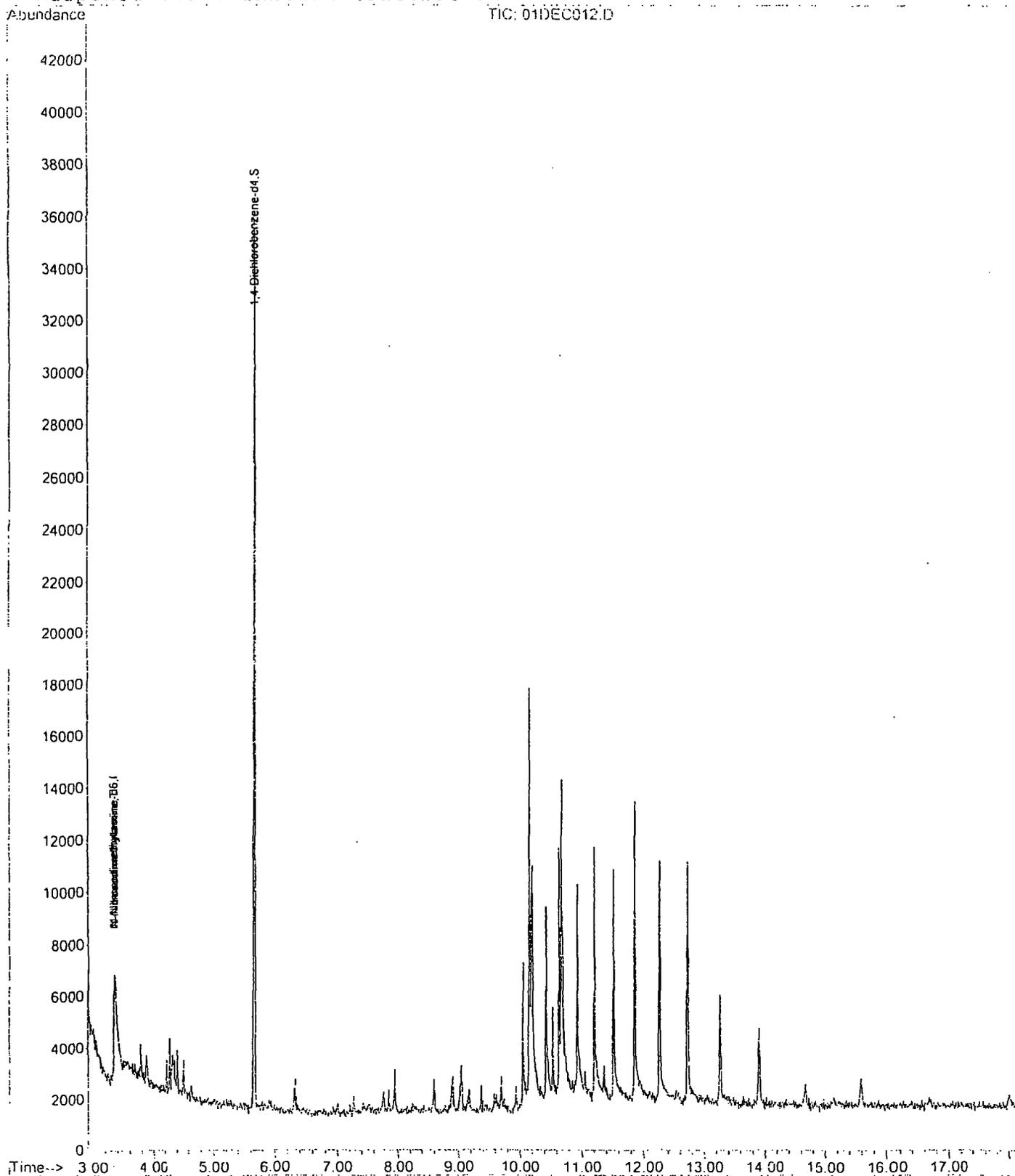
2 = 01DEC015.D 10 = 01DEC014.D 20 = 01DEC013.D
 50 = 01DEC016.D 100 = 01DEC017.D

Compound		2	10	20	50	100	Avg	%RSD
1) I	N-Nitrosodimethylamin	-----ISTD-----						
2) T	N-Nitrosodimethyl	1.845	1.850	1.689	1.988	2.194	1.913	9.89
3) S	1,4-Dichlorobenze	9.983	8.941	7.748	7.975	8.266	8.583	10.51

Quantitation Report (OT Reviewed)

File Path: C:\MSDCHEM\1\DATA\74170\110106\01.D
Date: 01 Dec 2006 10:30 AM
Operator: [Name]
Title: [Title]
File Name: 01DEC012.D
Sample Name: [Sample Name]
Injection Volume: 1.00
Injection Port: [Port]
Integration Params: [Params]
Start Time: 09:30 2006
Quant Results File: NDMA060421.REP

Method: [Method Name] (OTI Integrator)
Title: CLP SRA Calibration
Last Update: Mon Dec 04 09:30:04 2006
Response via: Initial Calibration



Quantitation Report (OT Reviewed)

Method: C:\MSDCHEM\1\METHODS\NDSM0002.M
 Date: 1 Dec 2006 14:24:06
 Operator: JSM
 Sample: 178504
 Multiplier: 1.00
 MS Integration Params: Initial
 Start Time: Dec 01 17:14:40 2006
 Output Results File: NDMAS00021.M

Method: C:\MSDCHEM\1\METHODS\NDSM0002.M (RTR Integration)
 Title: CLP BNA Calibration
 Last Update: Fri Dec 01 10:51:15 2006
 Response via: Initial Calibration
 DataAcq Meth: NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.34	80	3002m	20.00	ug/l	0.08
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	13420	29.11	ug/l	0.00
Spiked Amount	20.000		Recovery	=	145.55%	
Target Compounds						
2) N-Nitrosodimethylamine	3.36	74	2777m	15.52	ug/l	Qvalue

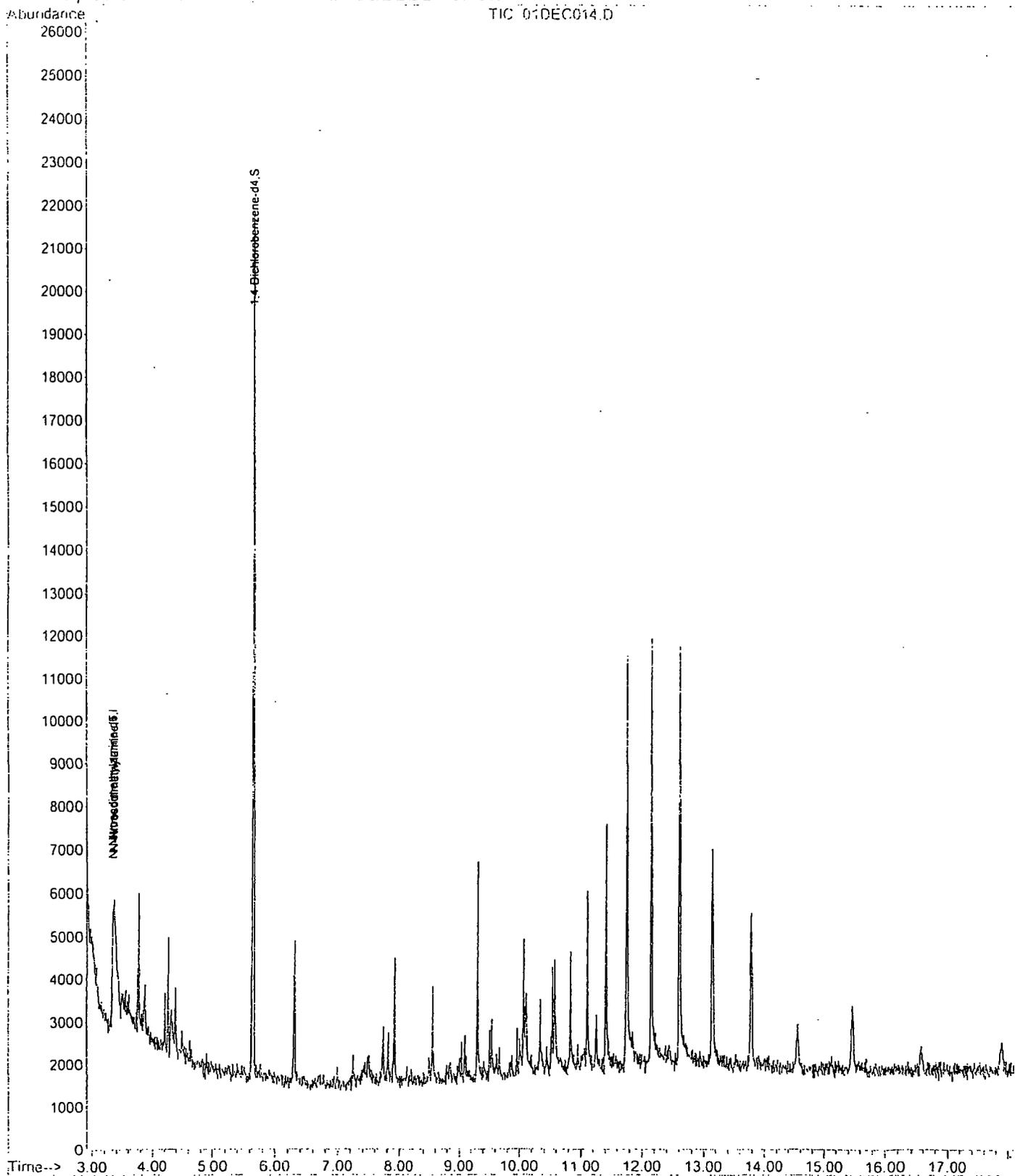
Quantitation Report (QF Reviewed)

File Name: C:\MSDCHEM\1\METHODS\NEW\041701.M
Date: 1 Dec 2006 4:24 pm
Sample: MMA-10P10-0001047
Date: 11/17/06
Integrator Params: Steiner
Start Time: Dec 1 17:14 2006

Operator:
Date: 12/01/06
Injection: 1.00

Quant Results File: MSDAC0621.D

Method: C:\MSDCHEM\1\METHODS\NEW\041701.M (QF Integrator)
Title: CLP BNA Calibration
Last Update: Mon Dec 04 09:30:54 2006
Response via: Initial Calibration



Quantitation Report (Q1 Reviewed)

Date: 12/01/2006 17:45:01
 File: C:\MSDCHEM\1\METHODS\NDMASIM3.M
 Method: NDMASIM3
 Operator: GSK
 Sample: 1000
 Multiplier: 1.00
 Integration Params: Method: NDMASIM3
 Quant Results File: NDMASIM3.D

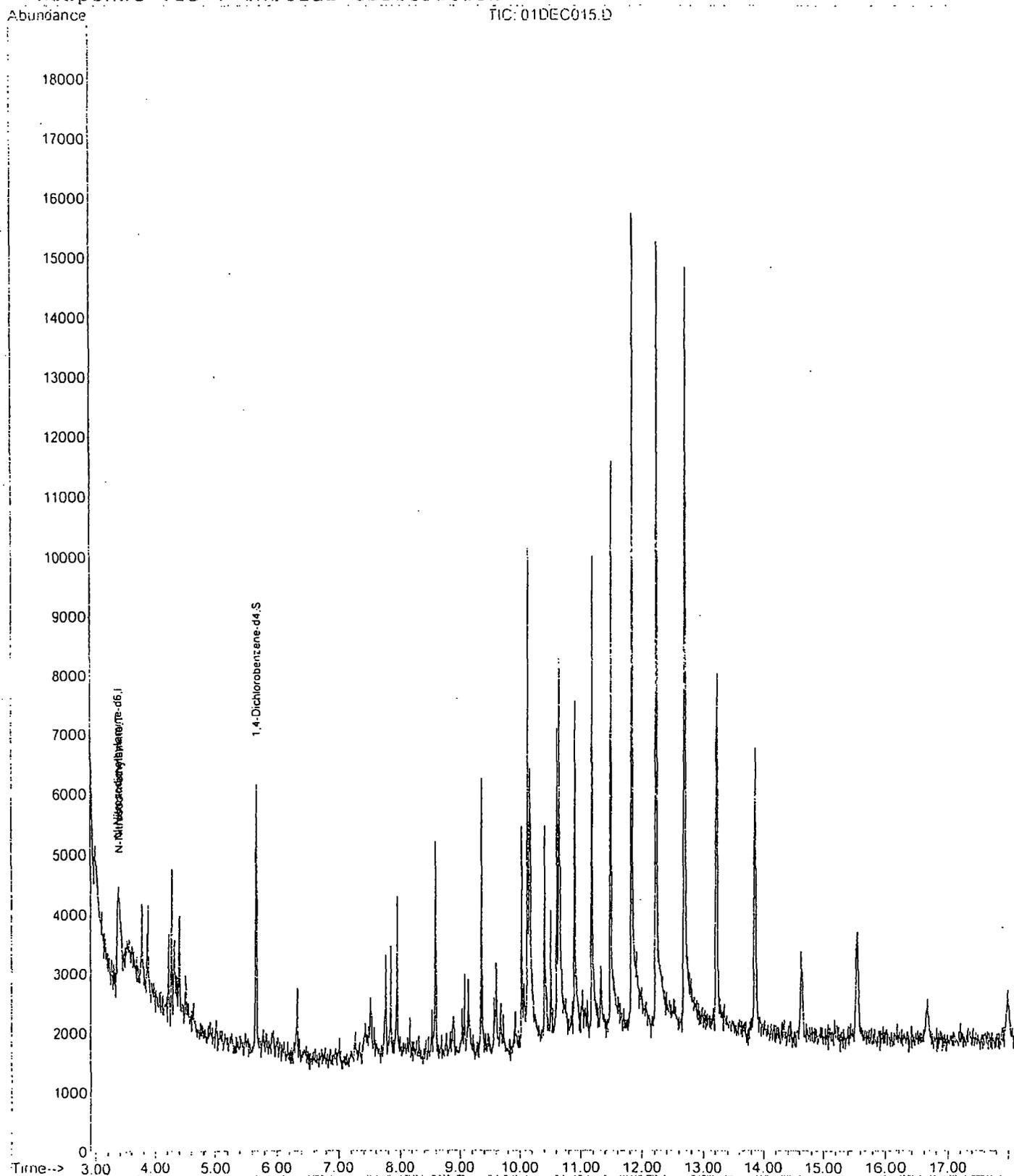
Report Method: C:\MSDCHEM\1\METHODS\NDMASIM3.M (SEE INTEGRATOR)
 Title: CLP BNA Calibration
 Last Update: Fri Dec 01 10:00:14 2006
 Response via: Initial Calibration
 DataAcq Meth: NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.37	80	3024m	20.00	ug/l	0.10
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	3019	6.50	ug/l	0.00
Spiked Amount	20.000		Recovery	=	32.50%	
Target Compounds						
2) N-Nitrosodimethylamine	3.40	74	558m	3.10	ug/l	Qvalue

Quantitation Report (QT Reviewed)

File Name: C:\MSDCHEM\DATA\B003\B031A061201.D
 Acquisition: Dec 2006 09:31:54
 Sample Name: B031A061201.D
 Date: Dec 2006
 Integration Parameters: Method: p
 Quant Time: Dec 4 9:28 2006
 Quant Results File: NIM7060921.RT

Method: C:\MSDCHEM\DATA\B003\B031A061201.D (NPD Integrator)
 Title: CLP BNA Calibration
 Last Update: Mon Dec 04 09:30:54 2006
 Response via: Initial Calibration



Quantitation Report (QF Reviewed)

Sample Name : AMSD\DATA\001201\0111015.D
 Date/Time : 1 Dec 2006 5:16 pm
 File Name : 001201_0111015.D

Operator :
 Date :
 Multiplier: 1.00

MS Integration Params: rstein.p
 Quant Time: Dec 04 09:22:42 2006

Quant Results File: NDMASIM3.BE

Quant Method: C:\MSDCHEM\METHODS\NDMASIM3.METHODS\NDMASIM3.METHODS\NDMASIM3.METHODS\NDMASIM3.METHODS\NDMASIM3.METHODS

Title : CLP BNA Calibration
 Last Update : Fri Dec 01 10:51:35 2006
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

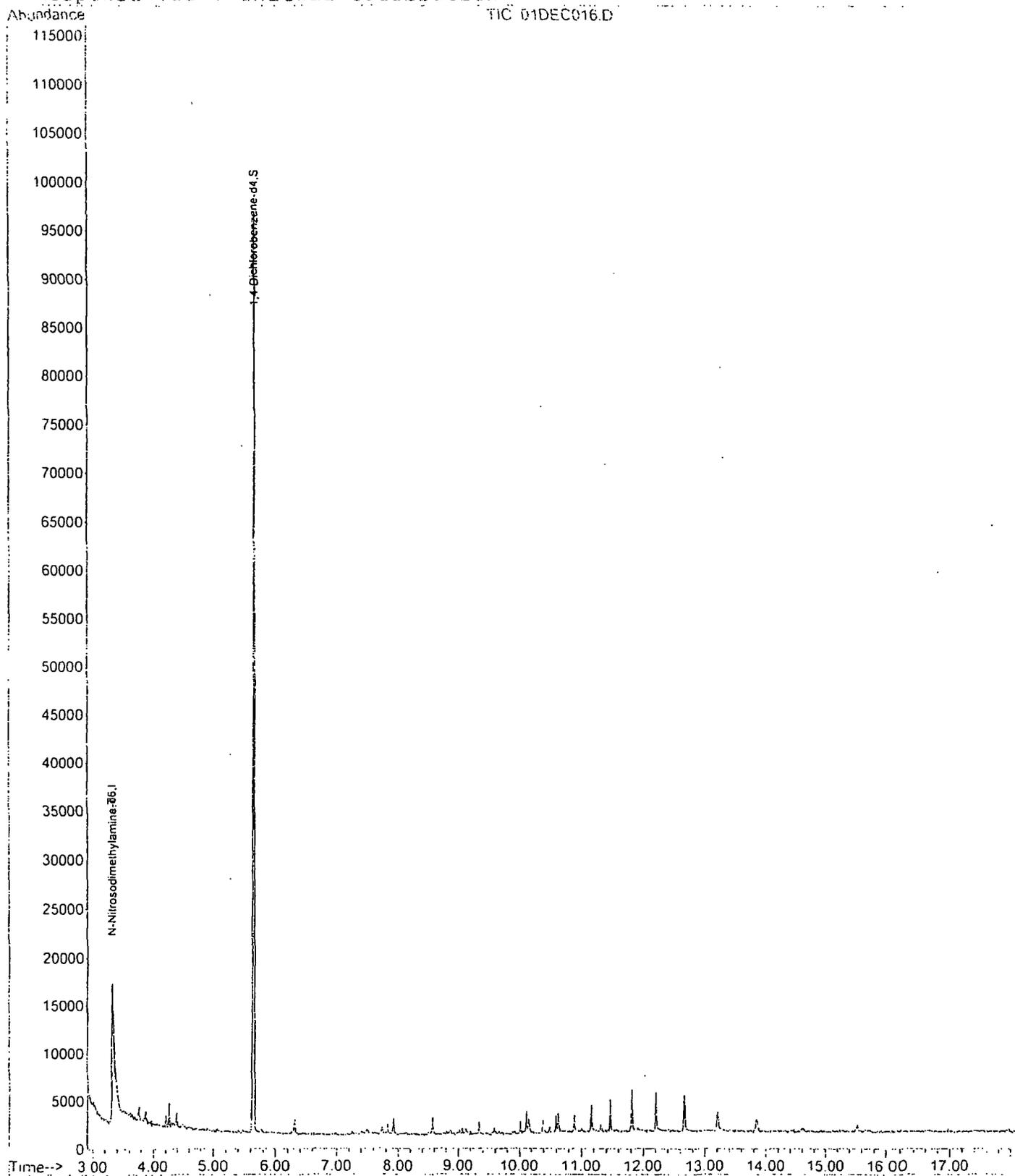
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3209m	20.00	ug/l	0.05
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	63979	129.82	ug/l	0.00
Spiked Amount	20.000		Recovery	=	649.10%	
Target Compounds						
2) N-Nitrosodimethylamine	3.32	74	15951	83.38	ug/l	Qvalue # 29

Quantitation Report (QT Reviewed)

MS Integration Parameters
Sample Name: 004-10710-0021-03
Date: Dec 4 9:22 2006
MS Integration Parameters: 1000000
Quant Results File: 00410710.D

Operator: [unreadable]
Multipl: 1.00

Method: C:\MSDCHEM\1\METHODS\NDSMAGS1201.M (MSP Integrator)
Title: CLP BNA Calibration
Last Update: Mon Dec 04 09:30:54 2006
Response via: Initial Calibration



Quantitation Report (OT Reviewed)

File Name: C:\MSDCHEM\1\METHODS\NDMASIM3\CLP_BNA_CALIB.D
 Date: Dec 01 2006 5:42 pm
 Method: NDMASIM3 06/21/06

Signal:
 Operator:
 Inj:
 Multiplier: 1.00

Integration Param: FileInt.p
 Quant Time: Dec 01 09 24:36 2006

Quant Results File: NDMASIM3\0021.R00

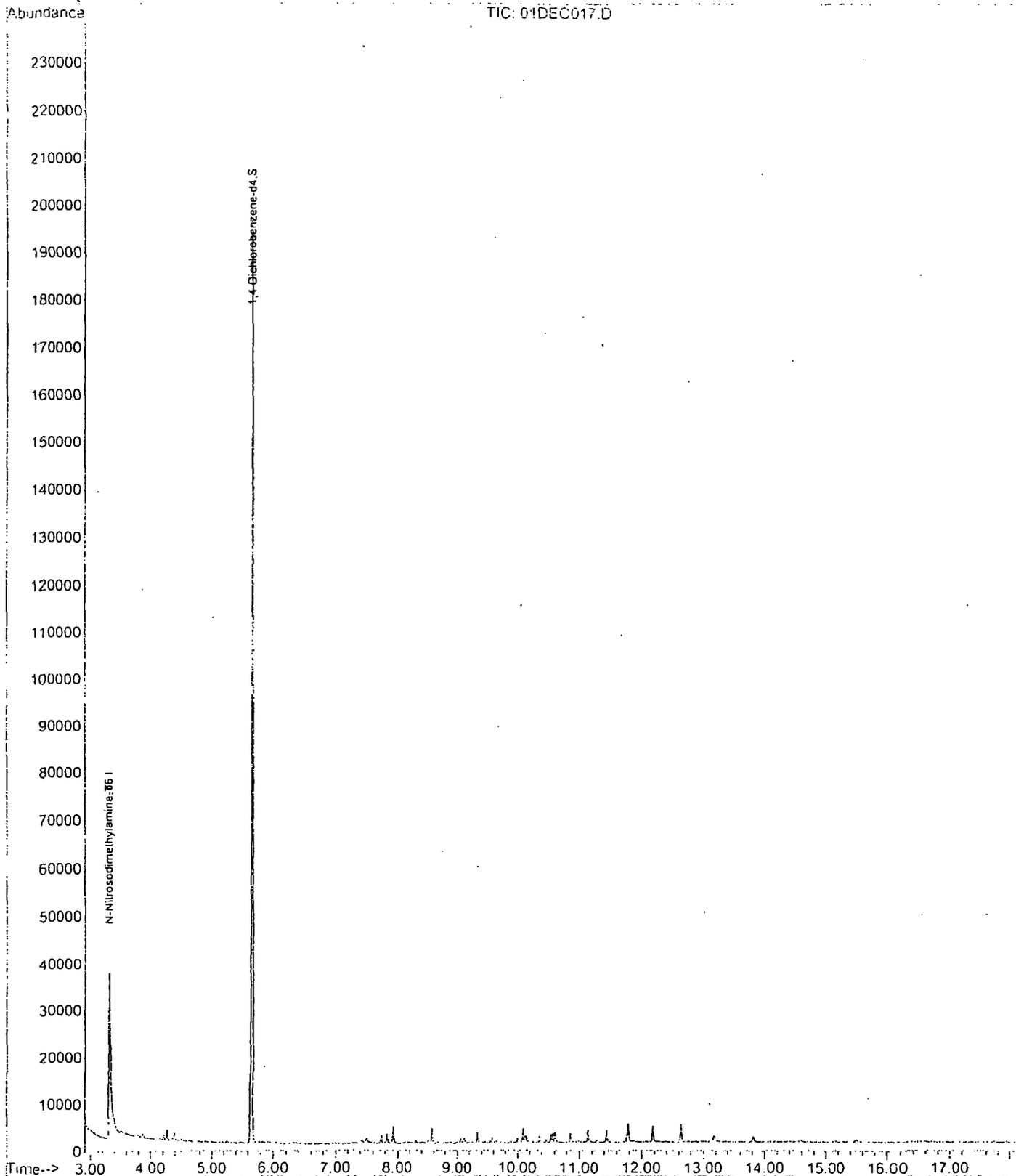
Quant Method: C:\MSDCHEM\1\METHODS\NDMASIM3\CLP_BNA_CALIB.D (PYS Integrator)
 Title: CLP_BNA Calibration
 Last Update: Fri Dec 01 10:43:15 2006
 Response via: Initial Calibration
 DataAcq Meth: NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3061m	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	126505	269.10	ug/l	0.00
Spiked Amount	20.000		Recovery	= 1345.50%		
Target Compounds						
2) N-Nitrosodimethylamine	3.30	74	33577m	184.01	ug/l	Qvalue

Quantitation Report (QV Reviewed)

File: 117 4 MSDCH0411-DATA\9413011-01.D (117.D) Vial: 1
Acq On: 3 Dec 2006 5:42 pm Operator:
Sample: MDMA 10001A 20921001 Time: 6040.3
Name: Multiplier: 1.00
MS Integration Params: stent.p
Quant Time: Dec 4 9:27 2006 Quant Results File: MDMA060521.R

Method: C:\MSDCHEM\1\METHODS\NDMA061301.D (PT8 Integrator)
Title: CLP BNA Calibration
Last Update: Mon Dec 04 09:30:54 2006
Response via: Initial Calibration



Quantitation Report (QT Reviewed)

DATA FILE: C:\MSDCHEM\ALAMETH\061201\NDMA061201.D
 Date: Dec 04 2006 7:01 pm
 User: MHW 201061201

Method: 5
 Operator:
 Inoc: 6010.0
 Multiplier: 1.00

MS Integration Params: rstein.p

Start Time: Dec 04 09:31:51 2006

Quant Results File: NDMA061201.RES

Quant Method: C:\MSDCHEM\ALAMETH\061201.M (5TC Integrator)

Title: CLP BNA Calibration

Last Update: Mon Dec 04 09:30:54 2006

Response via: Initial Calibration

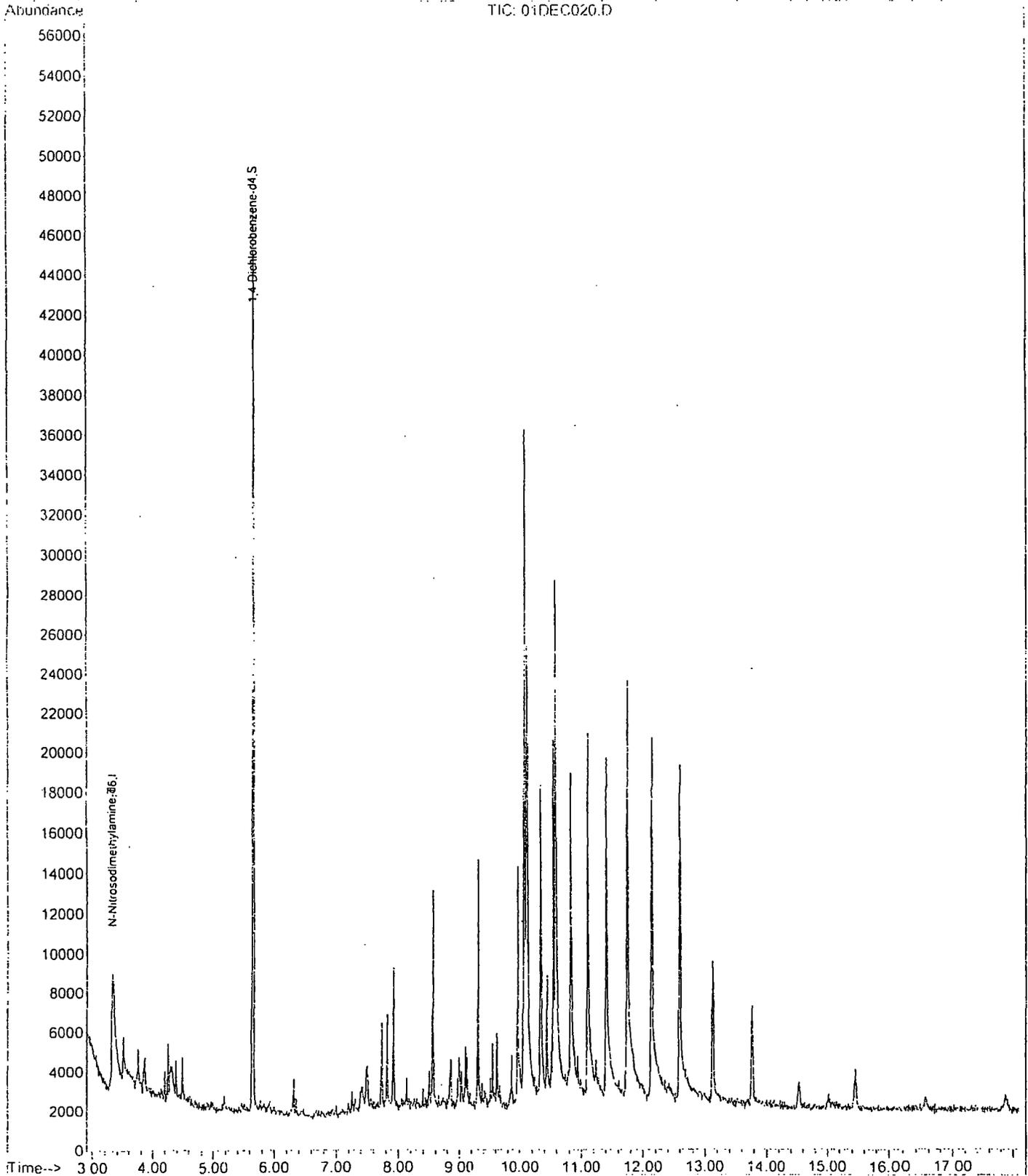
DataAcq Meth: NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3583m	20.00	ug/l	-0.01
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	28163	18.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	91.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.33	74	6435m	18.77	ug/l	Qvalue

Quantitation Report (QP Reviewed)

File: C:\MSDCHEM\1\METHODS\BNA\CLP\DATA\001\00105105.D
Acq On: 1 Dec 2005 9:01 pm
Sample: BNA 001 001 00105105
File: 00105105.D
MS Integration Params: reset.p
Quant Time: Dec 1 9:32 2005
Quant Results File: NDMAGS1201.D

Method: C:\MSDCHEM\1\METHODS\BNA\CLP\BNA (KIL Integration)
Title: CLP BNA Calibration
Last Update: Mon Dec 04 09:30 54 2005
Response via: Initial Calibration



Quantitation Report (OT Reviewed)

File Name: C:\MSDCHEM\1\METHODS\DMASIM3\DATA\04093109.D
 Date: Dec 04 2006 7:01 pm
 Path: C:\MSDCHEM\1\METHODS\DMASIM3\DATA\04093109.D

Analyst: [blank]
 Operator: [blank]
 Test: [blank]
 Multiplier: 1.00

Integration Params: [blank]
 Quant Date: Dec 04 09 31 51 2006

Quant Results File: NDMA061201.PRS

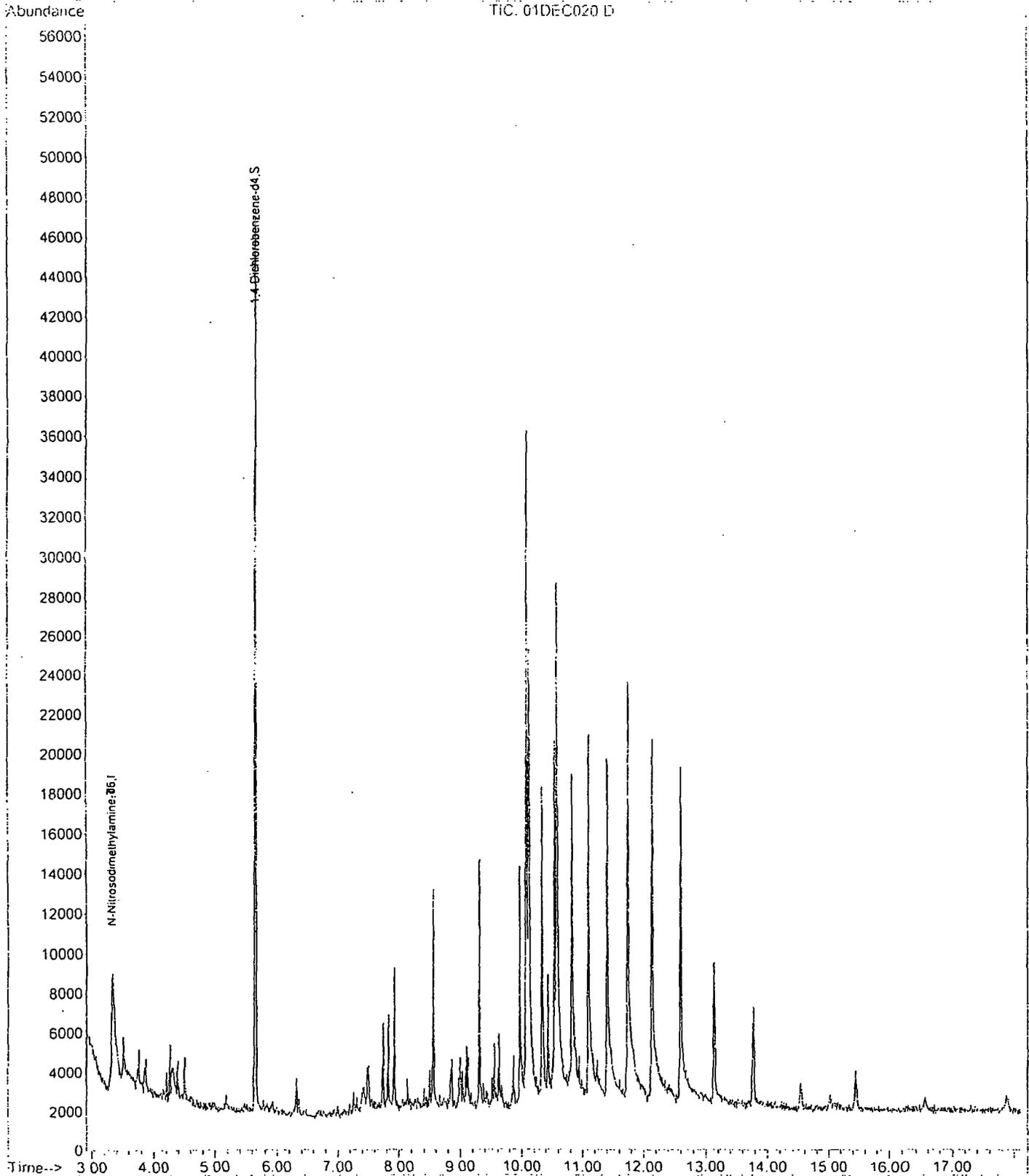
Method: C:\MSDCHEM\1\METHODS\DMASIM3\181E (Integrator)
 Title: CLP BNA Calibration
 Last Update: Mon Dec 04 09:30:59 2006
 Response via: Initial Calibration
 DataAcq Meth: NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3583m	20.00	ug/l	-0.01
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	28163	18.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	91.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.33	74	6435m	18.77	ug/l	Qvalue

Quantitation Report (OT Reviewed)

DATE TIME: 01 DEC 2000 7:03 PM
FILE: NDMAG061200.D
METHOD: CLM50CHEM1.METHODS\CLM501.M
INSTR: CLM501
REACTOR: 1.00
MS INTEGRATION PARAMS: INITIAL P
QUANT TIME: DEC 4 9:32 2000
QUANT RESULTS FILE: NDMAG061200.RPT

METHOD: CLM50CHEM1.METHODS\CLM501.M (MPC INTEGRATION)
FILE: CLM501.BNA Calibration
LAST UPDATE: Mon Dec 04 09:30:54 2000
RESPONSE VIA: Initial Calibration



Evaluate Continuing Calibration Report

File Path: C:\MSDCHEM\METHODS\MDMA061201.M
 Date: Dec 04 2006 11:01 pm
 Sample: MDMA 20-100 81261067

Method:
 Operator:
 Date: 12/04/06
 Substrate: 02

RT Integration Params: rtint.p

Method: C:\MSDCHEM\METHODS\MDMA061201.M (RTE Integrator)
 Title: OLF BNA Calibration
 Last Update: Mon Dec 04 09:30:54 2006
 Response via: Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)
1	I N-Nitrosodimethylamine-d6	1.000	1.000	0.0	121	-0.01
2	T N-Nitrosodimethylamine	1.913	1.796	6.1	129	-0.02
3	S 1,4-Dichlorobenzene-d4	8.583	7.860	8.4	123	0.00

Injection Log

Directory: C:\MSDCHEM\1\DATA\070109

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	09JAN001.D	1.	NDMA 20PPB S121906H		9 Jan 2007 16:21
2	10	09JAN010.D	1.	NDMA MB 070108-L16		9 Jan 2007 20:18
3	11	09JAN011.D	1.	NDMA LCS 070108-L16		9 Jan 2007 20:44
4	12	09JAN012.D	1.	NDMA LCSD 070108-L16		9 Jan 2007 21:11

Line

1
2
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1
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4

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D
 Acq On : 9 Jan 2007 4:21 pm
 Sample : NDMA 20PPB S121906H
 Integration Params: rteint.p
 Quant Time: Jan 09 16:43:20 2007

Vial: 1
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

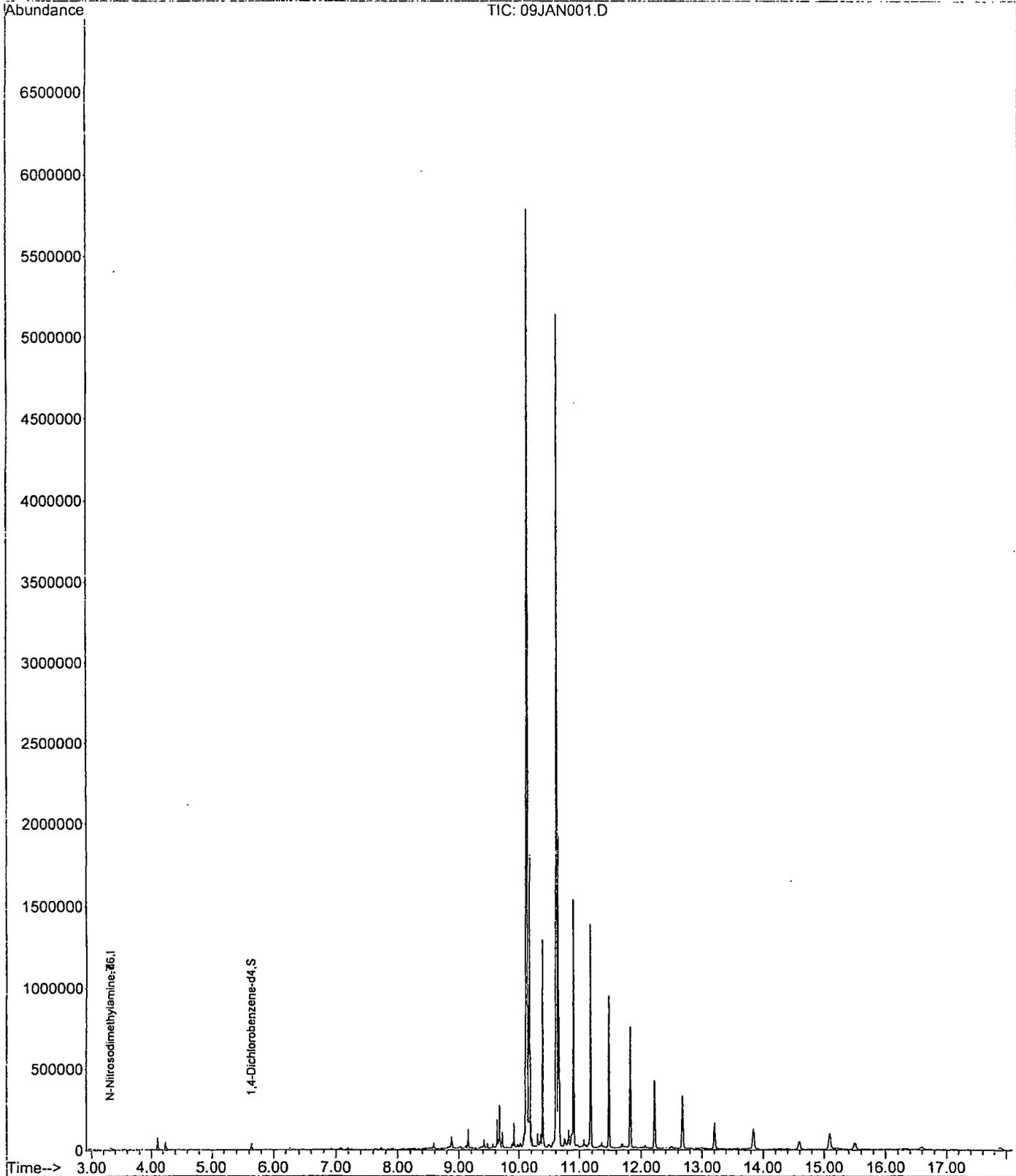
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3365m	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	23324	16.15	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	80.75%	
Target Compounds						
2) N-Nitrosodimethylamine	3.32	74	6629	20.59	ug/l	Qvalue 84

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D
Acq On : 9 Jan 2007 4:21 pm
Sample : NDMA 20PPB S121906H
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 9 16:43 2007

Vial: 1
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D Vial: 1
Acq On : 9 Jan 2007 4:21 pm Operator:
Sample : NDMA 20PPB S121906H Inst : GCMS_H
Disc : Multiplr: 1.00
S Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	N-Nitrosodimethylamine-d6	1.000	1.000	0.0	114	0.03
2 T	N-Nitrosodimethylamine	1.913	1.970	-3.0	133	0.03
3 S	1,4-Dichlorobenzene-d4	8.583	6.931	19.2	102	-0.01

Data File : C:\MSDCHEM\1\DATA\070109\09JAN010.D
 Acq On : 9 Jan 2007 8:18 pm
 Sample : NDMA MB 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 08:41:00 2007

Vial: 10
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

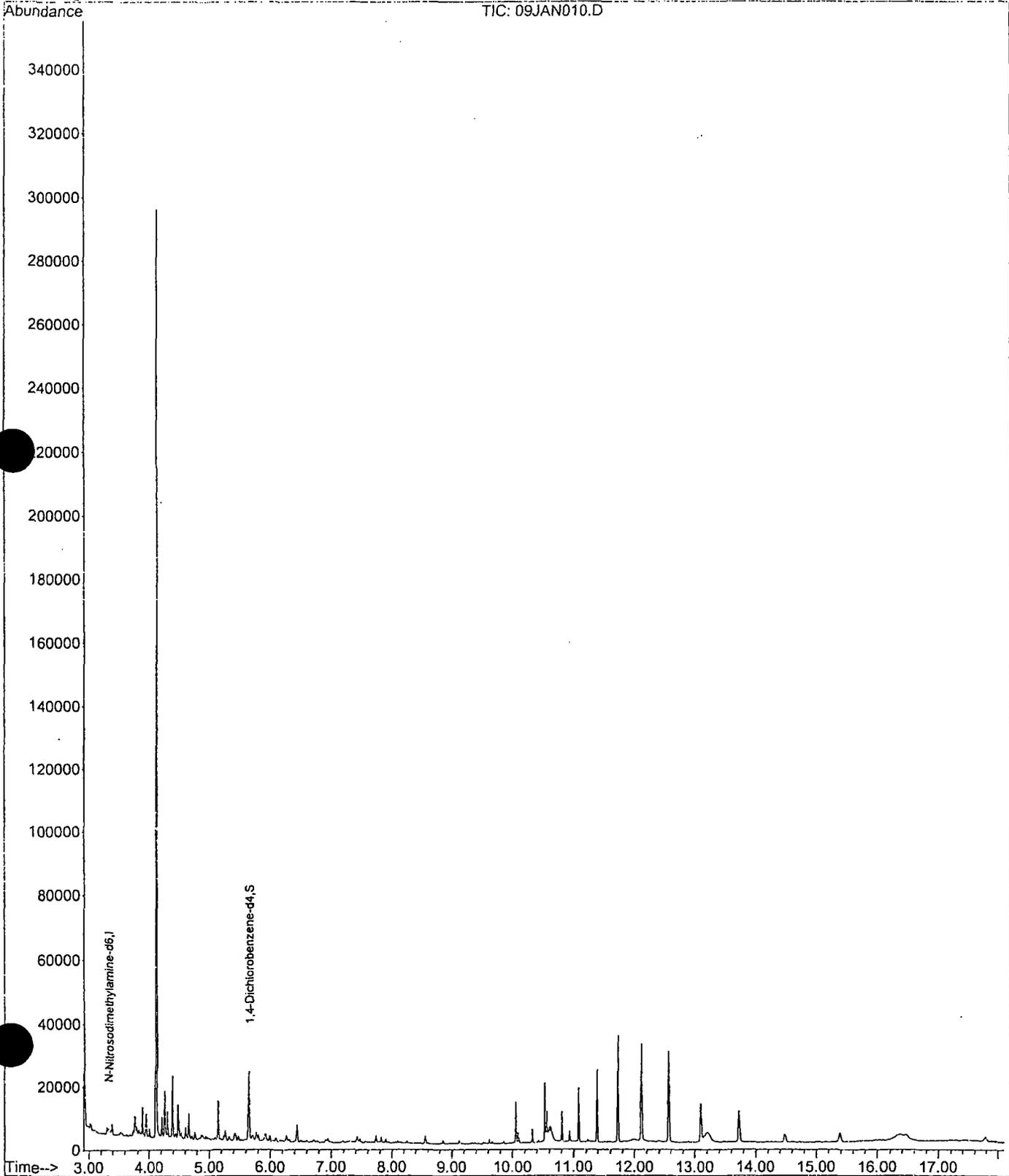
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.34	80	1074	20.00	ug/l	0.06
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	11943	25.91	ug/l	0.00
Spiked Amount	20.000		Recovery	=	129.55%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

Data File : C:\MSDCHEM\1\DATA\070109\09JAN010.D
Acq On : 9 Jan 2007 8:18 pm
Sample : NDMA MB 070108-L16
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 10 8:41 2007

Vial: 10
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN011.D
 Acq On : 9 Jan.2007 8:44 pm
 Sample : NDMA LCS 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 08:41:31 2007

Vial: 11
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

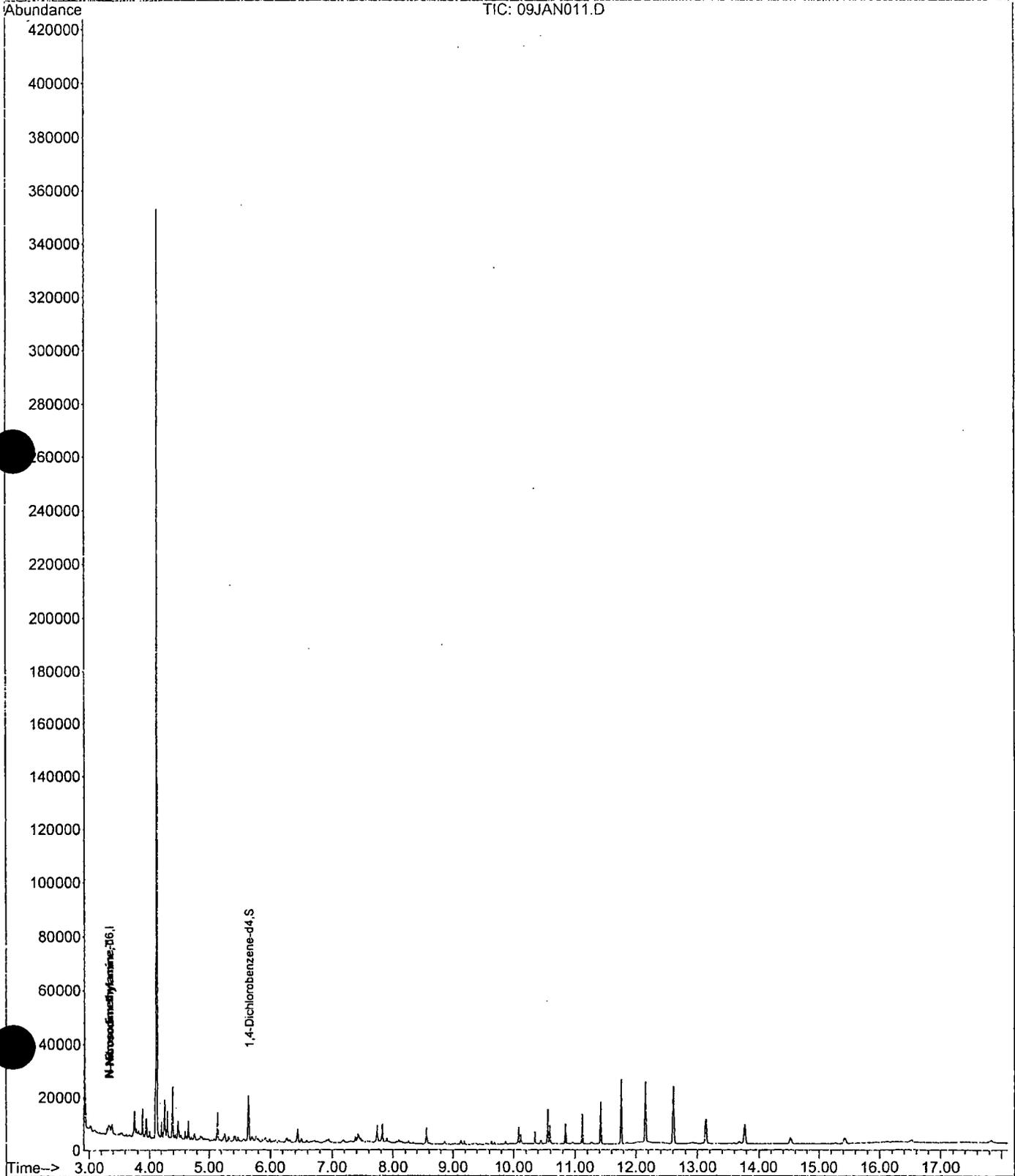
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.32	80	1633	20.00	ug/l	0.04
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	9898	14.12	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	70.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.35	74	1863	11.93	ug/l	Qvalue 89

Data File : C:\MSDCHEM\1\DATA\070109\09JAN011.D
 Acq On : 9 Jan 2007 8:44 pm
 Sample : NDMA LCS 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 8:41 2007

Vial: 11
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN012.D
 Acq On : 9 Jan 2007 9:11 pm
 Sample : NDMA LCS D 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 08:41:51 2007

Vial: 12
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

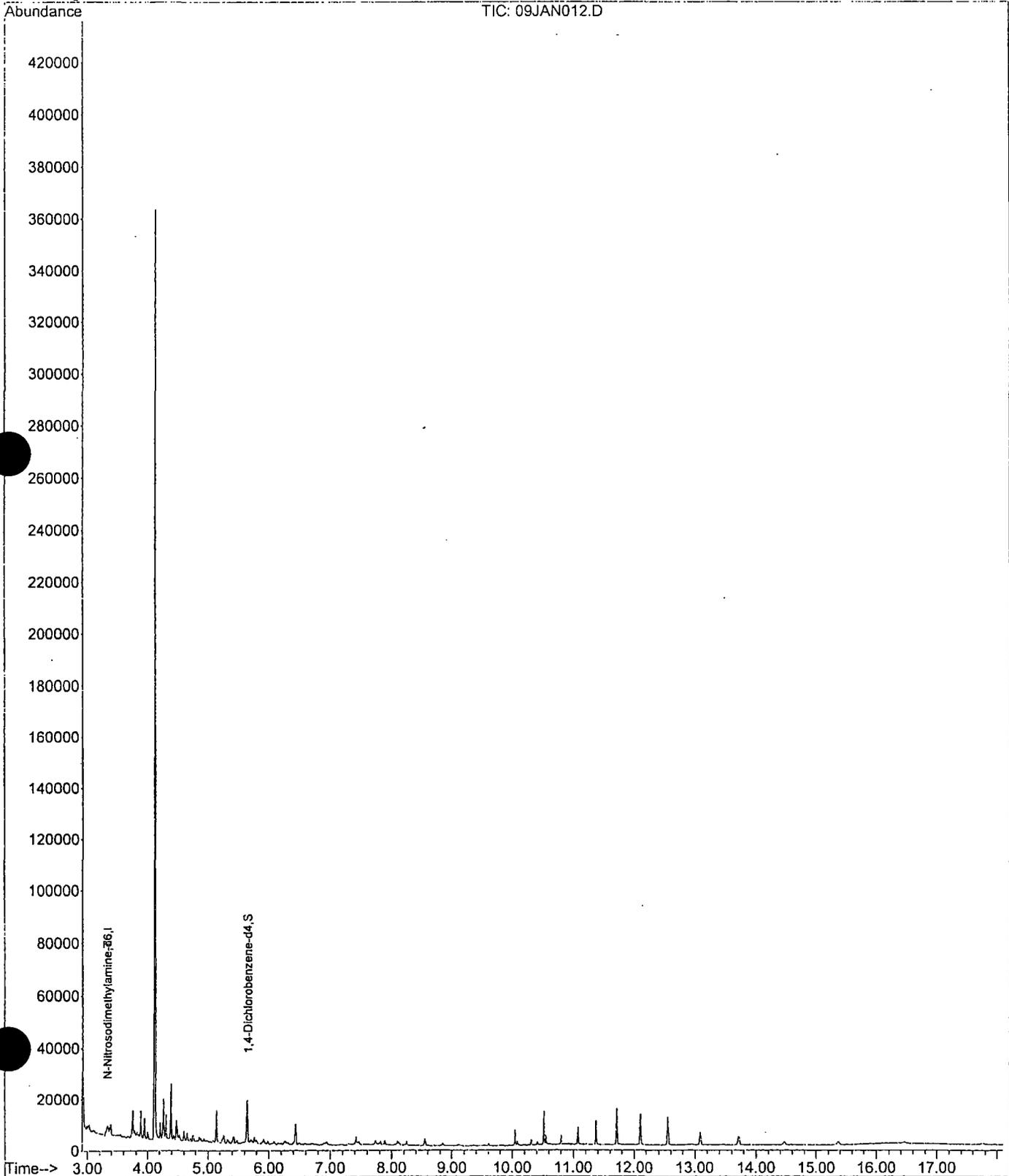
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.33	80	2083	20.00	ug/l	0.05
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	10123	11.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	56.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.34	74	2003	10.05	ug/l	Qvalue 86

Data File : C:\MSDCHEM\1\DATA\070109\09JAN012.D
 Acq On : 9 Jan 2007 9:11 pm
 Sample : NDMA LCSD 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 8:41 2007

Vial: 12
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration



Injection Log

Directory: C:\MSDCHEM\1\DATA\070110

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	10JAN001.D	1.	NDMA 20PPB S121906H		10 Jan 2007 08:45
2	3	10JAN003.D	1.	01-0388-2		10 Jan 2007 10:08
3	4	10JAN004.D	1.	01-0388-3		10 Jan 2007 10:34
4	6	10JAN006.D	1.	01-0382-2		10 Jan 2007 11:27
5	8	10JAN008.D	1.	01-0388-4		10 Jan 2007 12:20
5	9	10JAN009.D	1.	01-0388-1		10 Jan 2007 12:50
7	10	10JAN010.D	1.	NDMA 1PPB MDL VERIFICATION		10 Jan 2007 13:16
3	11	10JAN011.D	1.	NDMA 1PPB MDL VERIFICATION		10 Jan 2007 14:29
9	12	10JAN012.D	1.	01-0470-1		10 Jan 2007 15:24
10		10JAN013.D	1.			

Line

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Data File : C:\MSDCHEM\1\DATA\070110\10JAN001.D

Vial: 1

Acq On : 10 Jan 2007 8:45 am

Operator:

Sample : NDMA 20PPB S121906H

Inst : GCMS_H

C :

Multiplr: 1.00

Integration Params: rteint.p

Quant Time: Jan 10 09:09:43 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

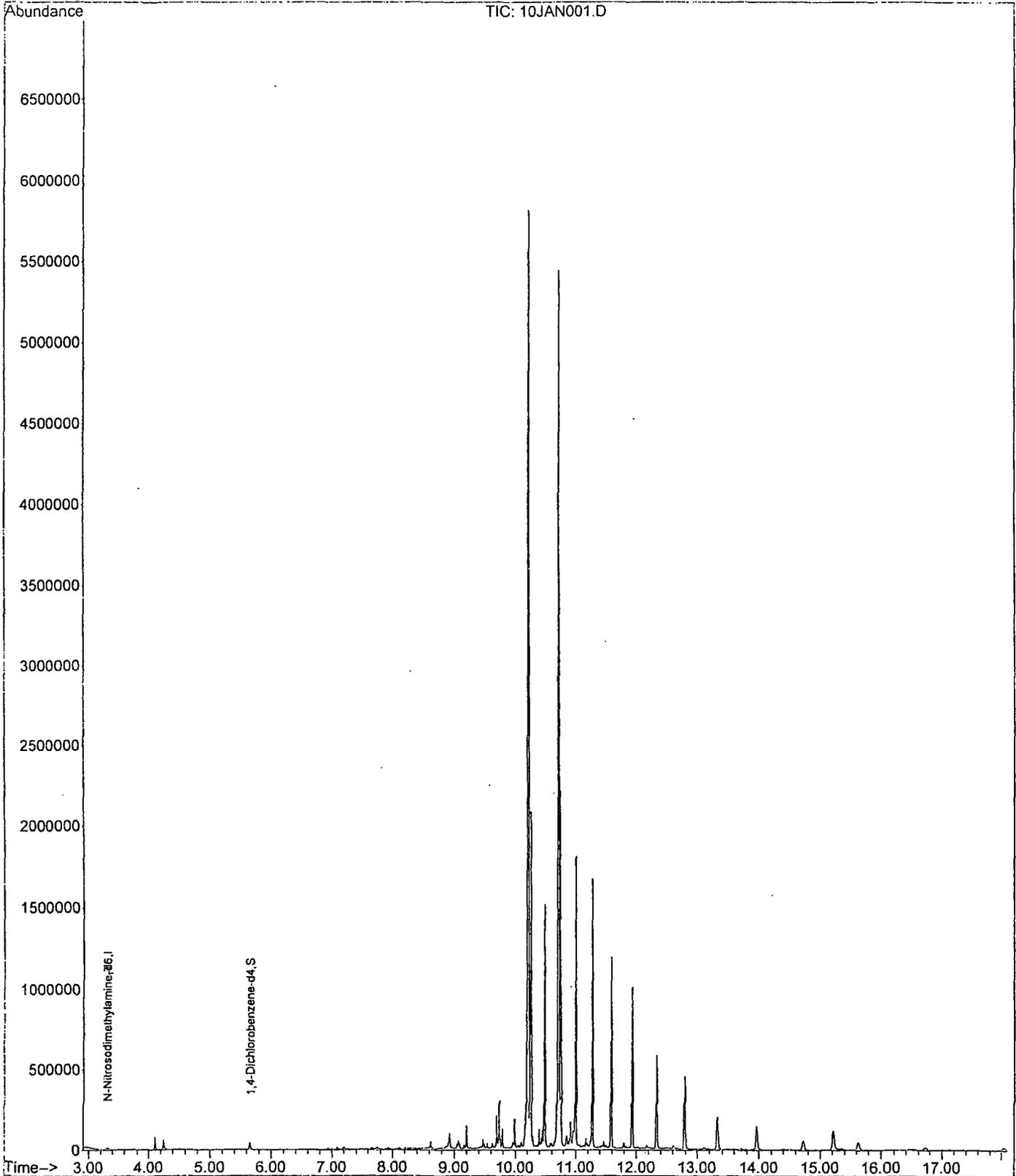
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.30	80	2702	20.00	ug/l	0.02
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	26429	22.79	ug/l	0.00
Spiked Amount	20.000		Recovery	=	113.95%	
Target Compounds						
2) N-Nitrosodimethylamine	3.31	74	6160	23.83	ug/l	Qvalue 89

Data File : C:\MSDCHEM\1\DATA\070110\10JAN001.D
 Acq On : 10 Jan 2007 8:45 am
 Sample : NDMA 20PPB S121906H
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 9:09 2007

Vial: 1
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070110\10JAN001.D

Vial: 1

Acq On : 10 Jan 2007 8:45 am

Operator:

Sample : NDMA 20PPB S121906H

Inst : GCMS_H

isc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I N-Nitrosodimethylamine-d6	1.000	1.000	0.0	92	0.02
2	T N-Nitrosodimethylamine	1.913	2.280	-19.2	124	0.02
3	S 1,4-Dichlorobenzene-d4	8.583	9.781	-14.0	116	0.00

Data File : C:\MSDCHEM\1\DATA\070110\10JAN003.D
 Acq On : 10 Jan 2007 10:08 am
 Sample : 01-0388-2
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 10:55:39 2007

Vial: 3
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

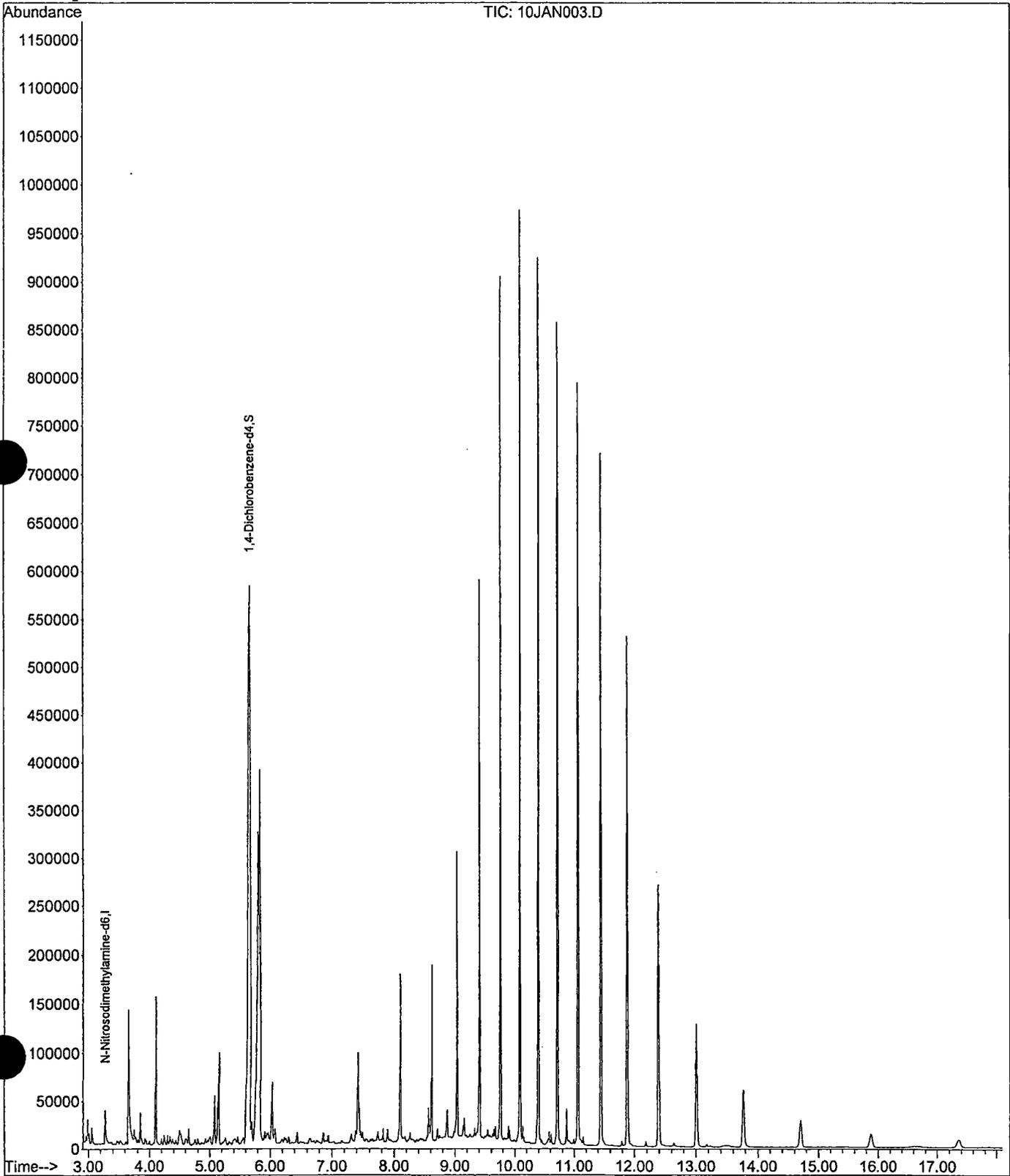
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.28	80	1757	20.00	ug/l	0.00
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	9579	12.70	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	63.50%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

Data File : C:\MSDCHEM\1\DATA\070110\10JAN003.D
Acq On : 10 Jan 2007 10:08 am
Sample : 01-0388-2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 10 10:55 2007

Vial: 3
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070110\10JAN004.D
 Acq On : 10 Jan 2007 10:34 am
 Sample : 01-0388-3
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 10:56:52 2007

Vial: 4
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

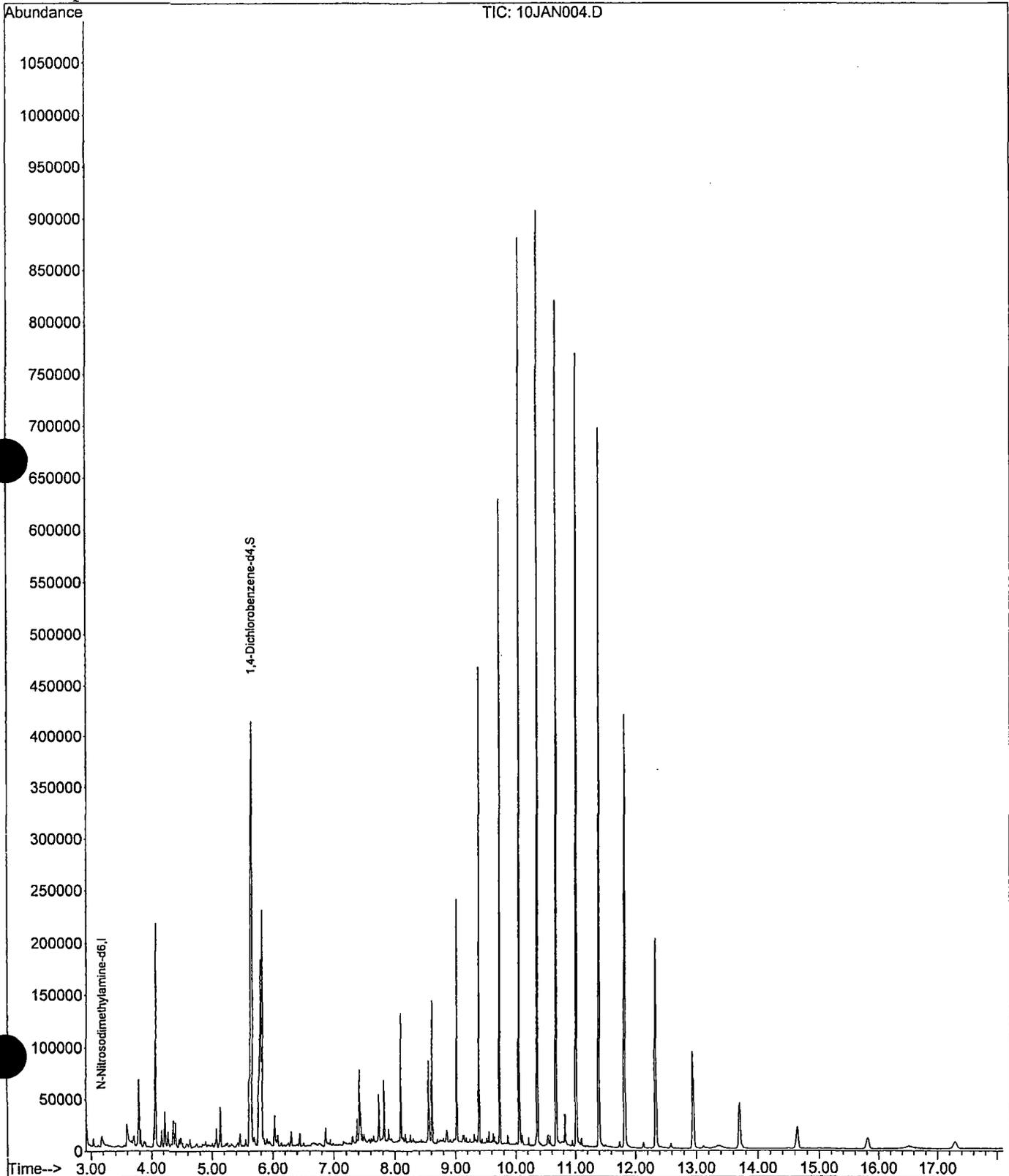
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.18	80	1325	20.00	ug/l	-0.10
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	6130	10.78	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	53.90%	
: Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

Data File : C:\MSDCHEM\1\DATA\070110\10JAN004.D
 Acq On : 10 Jan 2007 10:34 am
 Sample : 01-0388-3
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 10:57 2007

Vial: 4
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070110\10JAN008.D
 Acq On : 10 Jan 2007 12:20 pm
 Sample : 01-0388-4
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 12:48:11 2007

Vial: 8
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

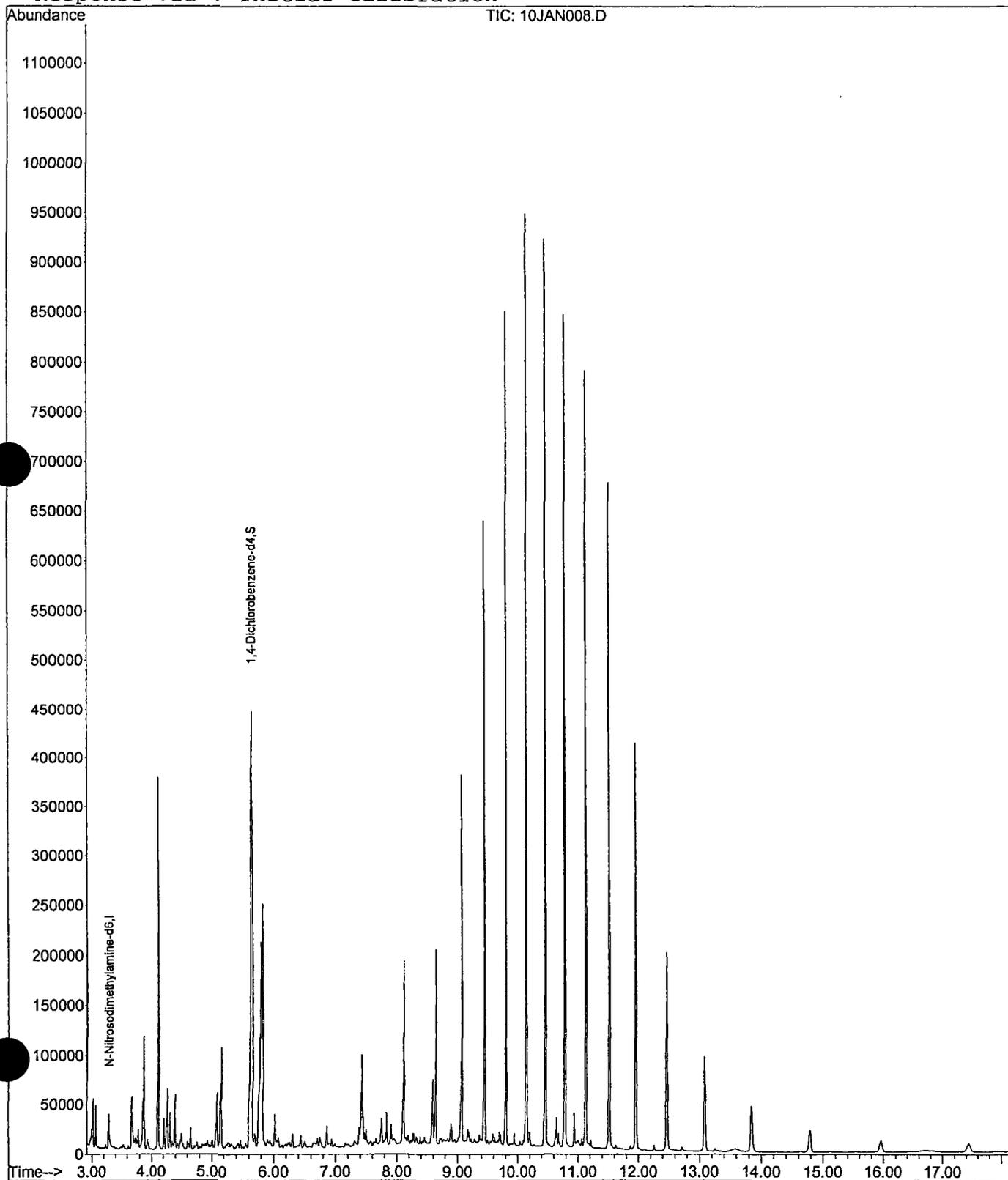
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.28	80	2426	20.00	ug/l	0.00
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	11996	11.52	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	57.60%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

Data File : C:\MSDCHEM\1\DATA\070110\10JAN008.D
Acq On : 10 Jan 2007 12:20 pm
Sample : 01-0388-4
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 10 12:48 2007

Vial: 8
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070110\10JAN009.D
 Acq On : 10 Jan 2007 12:50 pm
 Sample : 01-0388-1
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 14:26:50 2007

Vial: 9
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

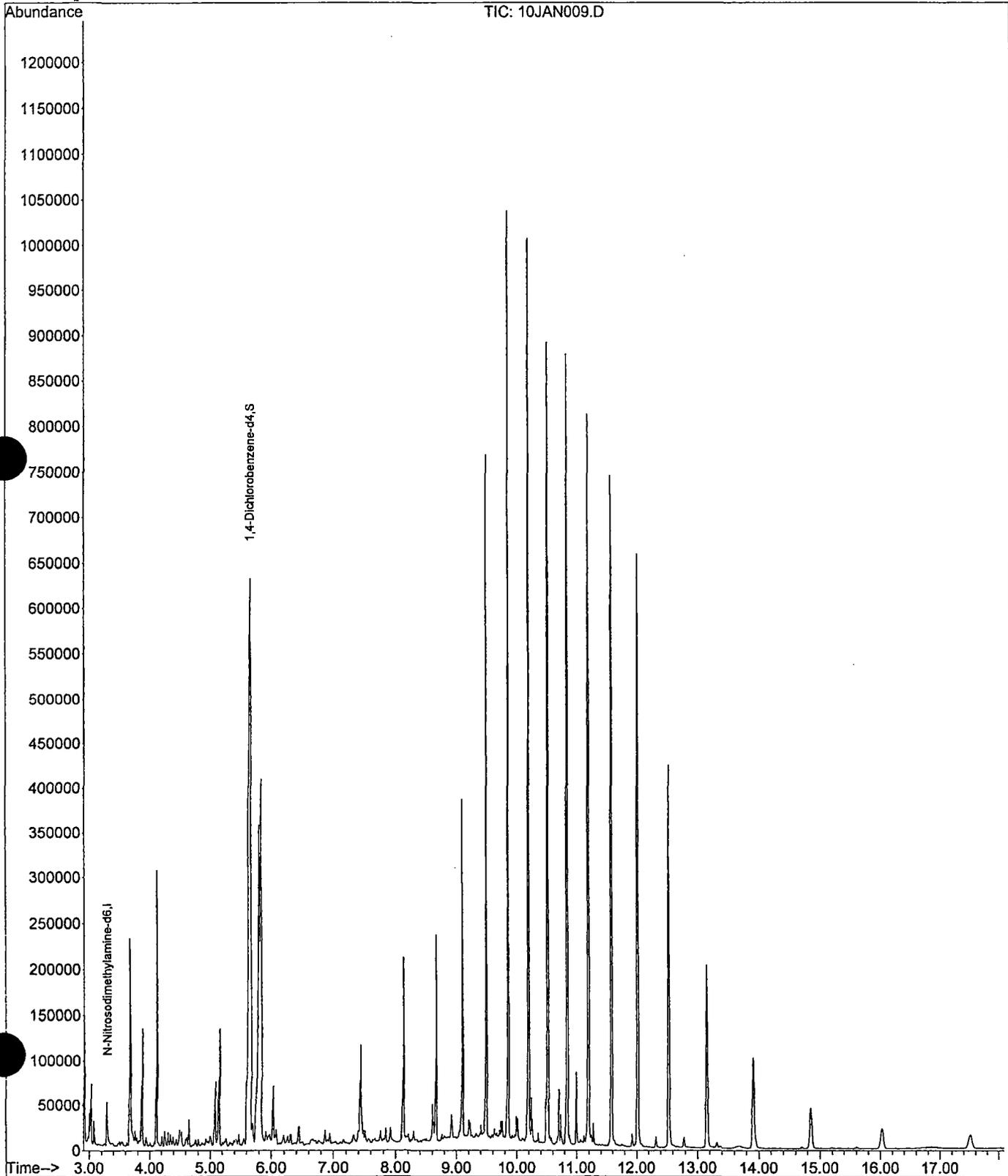
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.29	80	2999m	20.00	ug/l	0.00
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	13041	10.13	ug/l	0.00
Spiked Amount	20.000		Recovery	=	50.65%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

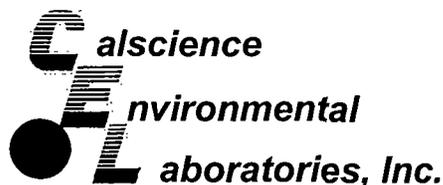
Data File : C:\MSDCHEM\1\DATA\070110\10JAN009.D
Acq On : 10 Jan 2007 12:50 pm
Sample : 01-0388-1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 10 14:27 2007

Vial: 9
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration





January 11, 2007

Robert Sabatar
Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Subject: **Calscience Work Order No.: 07-01-0477**
Client Reference: **Lockheed Martin BOU Quarterly GW
Monitoring/17653-0604**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/9/2007 and analyzed in accordance with the attached chain-of-custody.

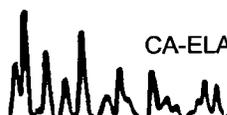
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.

Jason Torres
Project Manager



Case Narrative for 07-01-0477

Provided below is a narrative of our analytical effort for N-Nitrosodimethylamine (NDMA) analysis by EPA 1625C(M), including any unique features or anomalies encountered during analysis of the samples.

Sample Condition on Receipt

Three aqueous samples were received as part of this Work Order on January 09, 2007. The samples were transferred to the laboratory in an ice-chest following strict chain-of-custody procedures. The temperature (3.2°C) of the samples was measured upon arrival in the laboratory and was within acceptable limits. The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending analysis.

Data Summary (NDMA analysis only)Holding Times

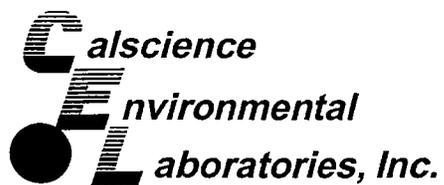
All holding time requirements were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

The method blank data showed non-detectable levels for all constituents.



Case Narrative for 07-01-0477

Laboratory Control Samples

The Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) analyses were performed at the required frequencies. All recoveries were within acceptable limits.

Surrogates

Surrogate recoveries for all samples were within acceptable control limits.



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 01/09/07
Work Order No: 07-01-0477
Preparation: EPA 3520B
Method: EPA 1625CM

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-9	07-01-0477-1	01/09/07	Aqueous	01/09/07	01/11/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	68	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-8	07-01-0477-2	01/09/07	Aqueous	01/09/07	01/11/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	59	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-7	07-01-0477-3	01/09/07	Aqueous	01/09/07	01/11/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	83	50-130				

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-027-304	N/A	Aqueous	01/08/07	01/09/07	070108L16

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
N-Nitrosodimethylamine	ND	2.0	0.48	1		ng/L
Surrogates:	REC (%)	Control Limits			Qual	
1,4-Dichlorobenzene-d4	130	50-130				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 01/09/07
Work Order No: 07-01-0477

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-9	07-01-0477-1	01/09/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.7	0.20	0.0050	1	B	ug/L	N/A	01/09/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/10/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-8	07-01-0477-2	01/09/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.6	0.20	0.0050	1	B	ug/L	N/A	01/09/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/10/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-7	07-01-0477-3	01/09/07	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent	1.6	0.20	0.0050	1	B	ug/L	N/A	01/09/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/10/07	EPA 314.0

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		N/A	Aqueous

Comment(s): (1) Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chromium, Hexavalent (1)	0.15	0.20	0.0050	1	J	ug/L	N/A	01/09/07	EPA 218.6
Perchlorate (1)	ND	2.0	0.43	1		ug/L	N/A	01/10/07	EPA 314.0

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 07-01-0477

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	EPA 218.6	MW-7	01/09/07	N/A	120	121	85-121	1	0-4	
Perchlorate	EPA 314.0	MW-9	01/10/07	N/A	104	104	80-120	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

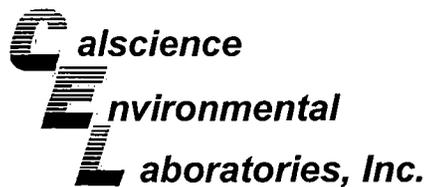
Date Received: N/A
Work Order No: 07-01-0477
Preparation: EPA 3520B
Method: EPA 1625CM

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-027-304	Aqueous	GC/MS.H	01/08/07	01/09/07	070108L16

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
N-Nitrosodimethylamine	60	50	50-130	17	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

Date Received: N/A
 Work Order No: 07-01-0477

Project: Lockheed Martin BOU Quarterly GW Monitoring/17653-0604

Matrix: Aqueous

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>LCS % REC</u>	<u>LCSD % REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qual</u>
Chromium, Hexavalent	EPA 218.6	099-05-124-574	N/A	01/09/07	100	103	95-107	2	0-20	
Perchlorate	EPA 314.0	099-05-203-533	N/A	01/10/07	95	97	85-115	1	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Work Order Number: 07-01-0477

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



TETRA TECH, INC.
 3475 E. FOOTHILL BLVD.
 PASADENA, CALIFORNIA 91107
 TELEPHONE (626) 351-4664
 FAX (626) 351-5291

SHIPPED TO: CALSCIENCE
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

CHAIN OF CUSTODY RECORD

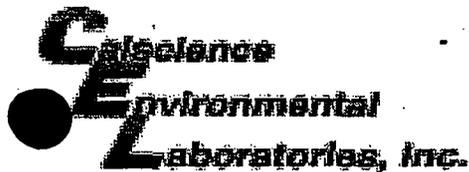
DATE 1/09/07 PAGE 1 OF 1

0477

CLIENT: <u>LOCKHEED MARTIN</u>			EXTRACTION/ANALYTICAL METHODS													TURN-AROUND TIME	
PROJECT NAME: <u>BOU QUARTERLY</u>			VOCs w/MTBE/From/Flcs (EPA 8260B) TDS (EPA 100.1) PH (EPA 150.1) Nitrate (EPA 500.1) Total Cr (EPA 6010) (Filtered) 1,2,3-TCP (EPA 504.1) 5242/LLS-9-CMS-7-SCM) 1,4-Dioxane (EPA 8270C 517) Perchlorate (EPA 514.0) Chromium IV (EPA 218.6) CAM METALS/Thallium (EPA 608/700) Filtered Common Anions w/Arson (EPA 601/300.0) F/filtered Dissolved Oxygen (EPA 360.1) Sulfide EPA 300.0 NDMA EPA 1625C	MATRIX TYPE	PRESERVATIVE	CONTAINER TYPE	NUMBER OF CONTAINERS	HEADSPACE READINGS (ppm)	STANDARD								
PROJECT MANAGER: <u>Robert Sabator</u>									OBSERVATIONS								
TC #: <u>17653-0604</u>									/COMMENTS								
SAMPLERS (SIGNATURES): <u>[Signature]</u>																	
SAMPLE NO.	DATE	TIME															
MW-9	1/9/07	0806						X	W	Y	G/P	3					
MW-8	1/9/07	0904						X	W	Y	G/P	3					
MW-7	1/9/07	1107						X	W	Y	G/P	3					

MATRIX TYPE: S - SOIL, W - WATER, SL - SLUDGE
 CONTAINER TYPES: G - GLASS BOTTLE/VOA, P - PLASTIC, SS - STAINLESS STEEL SLEEVE, BS - BRASS SLEEVE
 PRESERVATIVES: HCL, NR (NONE REQUIRED)
 TEMPERATURE BLANK EACH COOLER: YES NO

RELINQUISHED BY: <u>Norman We</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>TETRA TECH, INC.</u>	DATE: <u>1/9/07</u>	TIME: <u>14:05</u>	TOTAL NUMBER OF CONTAINERS: <u>9</u>
RECEIVED BY: <u>B. KRISTIAN</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>CALSCIENCE</u>	DATE: <u>1/09/07</u>	TIME: <u>14:05</u>	METHOD OF SHIPMENT: <u>LAB PICKUP</u>
RELINQUISHED BY: <u>B. KRISTIAN</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>Cal</u>	DATE: <u>1/09/07</u>	TIME: <u>17:15</u>	SPECIAL SHIPMENT/HANDLING OR STORAGE REQUIREMENTS:
RECEIVED BY: <u>Sheofama</u>	SIGNATURE: <u>[Signature]</u>	COMPANY: <u>(Cal)</u>	DATE: <u>01-09-07</u>	TIME: <u>17:15</u>	AIRBILL NO.:



WORK ORDER #: 07 - 01 - 0477

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TETRA TECH

DATE: 01/09/07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature.
3.2 C Temperature blank.

LABORATORY (Other than Calscience Courier):

- C Temperature blank.
C IR thermometer.
Ambient temperature.

Initial: [Signature]

CUSTODY SEAL INTACT:

Sample(s): Cooler: No (Not Intact): Not Present: Initial: [Signature]

SAMPLE CONDITION:

Table with columns: Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: [Signature]

COMMENTS:

Blank lines for handwritten comments.

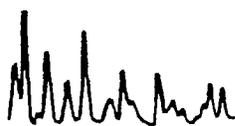


EPA 1625C(M) NDMA

Tetra Tech, Inc.

CEL #07-01-0477

Lockheed Martin BOU Quarterly GW
Monitoring/17653-0604



Date D=Date T=Time	pH Adjust D=Date T=Time	End D=Date T=Time	Matrix S=Soil A=Aqueous O=Oil Other(specify)	Extraction 1=3510 Sep 2=3520 C-LL 4=3540 Sox 5=3550 Son 8=3580 Dil	Client Name	Analysis	Work Order Number	Sample		Solvent			Who	Comment
								Initial (g/mL)	Final (mL)	Lot Number	Name/ Symbol	Volume (mL)		
D) 1-8-07 T) 8:30	D) / T) /	D) 1-9-07 T) 11:30	S (A) O	1 2 4 5 8	ENVENT	1675 cm	07-01-0382-2 ^S	1040	1	204662	COT/CL	350	col	pm 6-8
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8	TT		07-01-0388-1 ^B	1040						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.2 ^B	1040						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.3 ^B	1030						
D) / T) /	D) / T) /	D) / T) /	S (A) O	1 2 4 5 8			.4 ^B	1030						
D) 1-9-07 T) 6:30	D) / T) /	D) 1-10-07 T) 12:30	S (A) O	1 2 4 5 8	TT	1675 cm	07-01-0477-1 ^B	1040						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.2 ^B	1040						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.3 ^B	1030						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8	ENVIRON		07-01-0469-1 ^H	1040						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.2 ^H	1030						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8			.3 ^H	1050						
D) / T) /	D) / T) /	D) / T) /	S (A) O	1 2 4 5 8			07-01-0470-1 ^H	1030						
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										
D) / T) /	D) / T) /	D) / T) /	S A O	1 2 4 5 8										

Injection Log

Directory: C:\MSDCHEM\1\DATA\061201

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01DEC012.D	1.	NDMA 20PPB S092106H		1 Dec 2006 15:33
2	2	01DEC014.D	1.	NDMA 10PPB S092106J		1 Dec 2006 16:24
3	3	01DEC015.D	1.	NDMA 2PPB S092106K		1 Dec 2006 16:51
4	4	01DEC016.D	1.	NDMA 50PPB S092106G		1 Dec 2006 17:16
5	5	01DEC017.D	1.	NDMA 100PPB S092106F		1 Dec 2006 17:42
6	8	01DEC020.D	1.	NDMA 20-ICV S120106A		1 Dec 2006 19:01

LINE

1
2
3
4
5
6

LINE

1
2
3
4
5

Response Factor Report GCMS.H

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Mon Dec 04 09:30:54 2006
 Response via : Initial Calibration

Calibration Files

2 =01DEC015.D 10 =01DEC014.D 20 =01DEC012.D
 50 =01DEC016.D 100 =01DEC017.D

Compound	2	10	20	50	100	Avg	%RSD
1) I N-Nitrosodimethylamin	-----ISTD-----						
2) T N-Nitrosodimethyl	1.845	1.850	1.689	1.988	2.194	1.913	9.89
3) S 1,4-Dichlorobenze	9.983	8.941	7.748	7.975	8.266	8.583	10.51

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC012.D

Vial: 1

Acq On : 1 Dec 2006 3:33 pm

Operator:

File : MDMA 20PPB 002106H 3UL1200EM

Inst : GCMS_B

Integrator:

Multiplier: 1.00

4S Integration Params: rteint.p

Quant Time: Dec 01 17:14:03 2006

Quant Results File: MDMA060921.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA060921.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Fri Dec 01 10:51:15 2006

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.33	80	2949m	20.00	ug/l	0.06
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	22850	50.45	ug/l	0.00
Spiked Amount	20.000		Recovery	=	252.25%	
Target Compounds						
2) N-Nitrosodimethylamine	3.34	74	4981m	28.33	ug/l	Qvalue

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC012.D

Vial: 1

Acq On : 1 Dec 2006 3:33 pm

Operator:

Sample : NDMA 20PER 6092106H 3UL+20GEM

Inst : GCMS_H

Misc :

Multiplier: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 4 9:30 2006

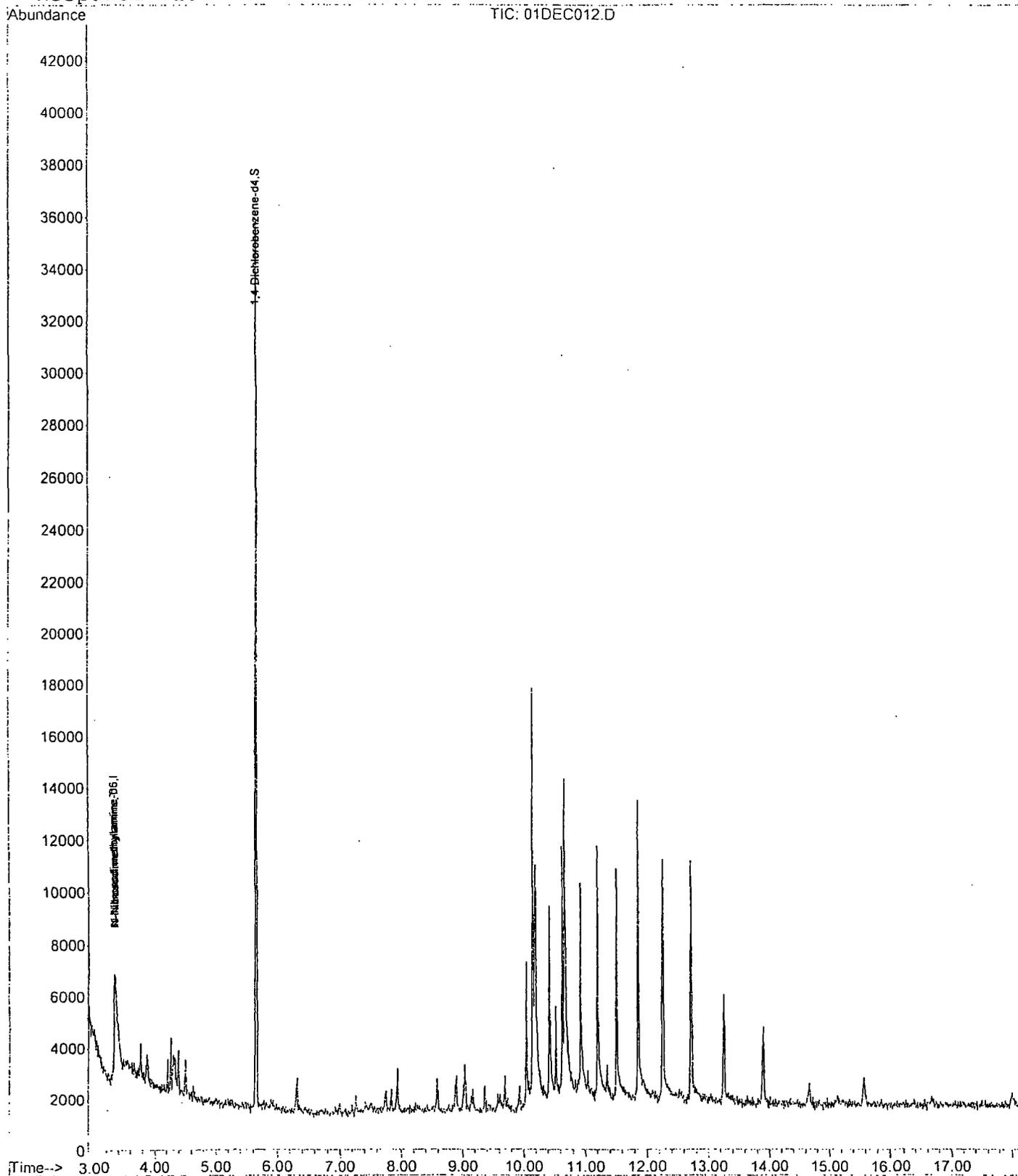
Quant Results File: NDMA060921.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (PTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Date File : C:\MSDCHEM\1\DATA\061701\01DEC014.D
 Acq On : 1 Dec 2006 4:24 pm
 Sample : NDMA 10PPE 80921067

Vial: 2
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Dec 01 17:14:40 2006

Quant Results File: NDMA060921.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA060921.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Fri Dec 01 10:51:15 2006
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.34	80	3002m	20.00	ug/l	0.08
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	13420	29.11	ug/l	0.00
Spiked Amount	20.000		Recovery	= 145.55%		
Target Compounds						
2) N-Nitrosodimethylamine	3.36	74	2777m	15.52	ug/l	Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC014.D

Vial: 2

Acq On : 1 Dec 2006 4:24 pm

Operator:

Sample : NDMA 10PPB 00921053

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 1 17:14 2006

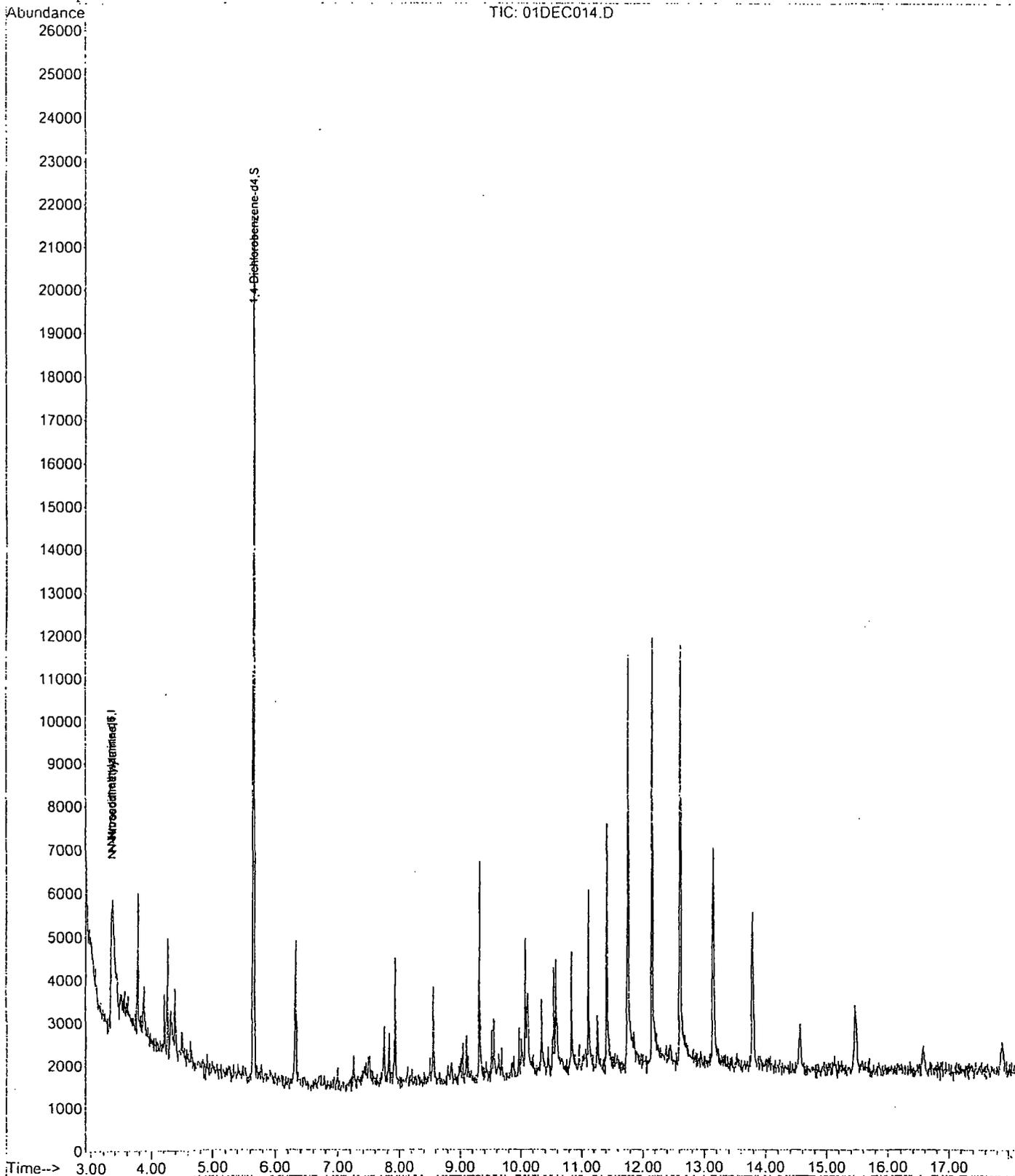
Quant Results File: NDMA060921.REI

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC015.D
 Acq On : 1 Dec 2006 4:51 pm
 Sample : NDMA 20PP 8092106K
 MS Integration Params: rteint.p
 Quant Time: Dec 01 17:15:01 2006

Vial: 3
 Operator:
 Inst : GCMS_H
 Multiplr 1.00

Quant Results File: NDMA060921.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA060921.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Fri Dec 01 10:51:15 2006
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.37	80	3024m	20.00	ug/l	0.10
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	3019	6.50	ug/l	0.00
Spiked Amount	20.000		Recovery	=	32.50%	
Target Compounds						
2) N-Nitrosodimethylamine	3.40	74	558m	3.10	ug/l	Qvalue

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC015.D

Vial: 3

Acq On : 1 Dec 2006 4:51 pm

Operator:

Sample : NDMA 2PPB 0092106K

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 4 9:28 2006

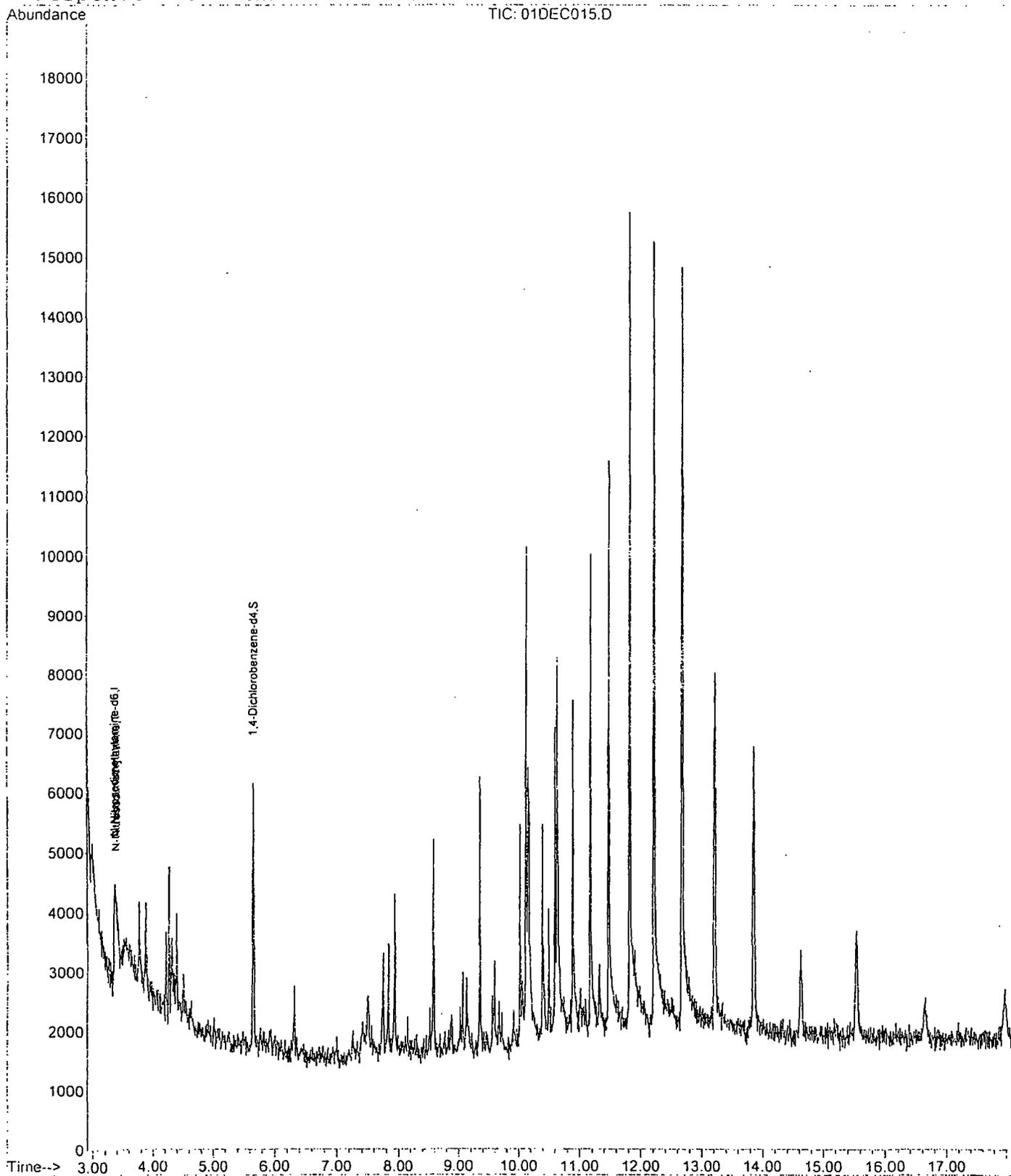
Quant Results File: NDMA060921.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC016.D
 Acq On : 1 Dec 2006 5:16 pm
 Sample : NDMA COPPE 50921068

Vial: 4
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 04 09:22:42 2006

Quant Results File: NDMA060921.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA060921.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Fri Dec 01 10:51:15 2006

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3209m	20.00	ug/l	0.05
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	63979	129.82	ug/l	0.00
Spiked Amount	20.000		Recovery	=	649.10%	
Target Compounds						
2) N-Nitrosodimethylamine	3.32	74	15951	83.38	ug/l	Qvalue # 29

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC016.D

Vial: 4

Acq On : 1 Dec 2006 5:16 pm

Operator:

Sample : NDMA 50PPB S092104G

Inst : GCMS_H

Misc :

Multiple: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 4 9:22 2006

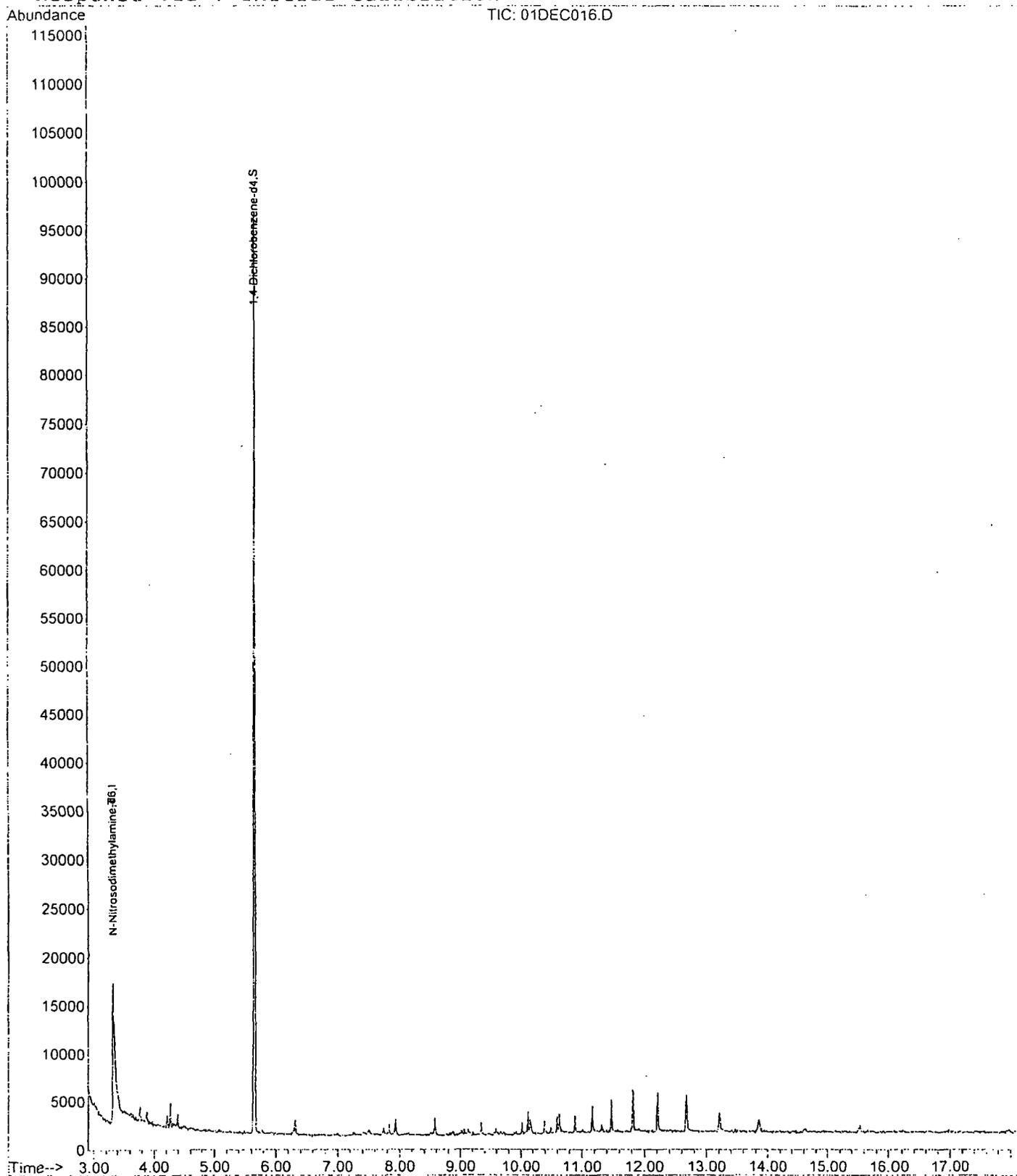
Quant Results File: NDMA060921.RE!

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC017.D

Vial: 5

Acq On : 1 Dec 2006 5:42 pm

Operator:

Sample : NDMA 100PPB S092106F

Inst : GCMS_H

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 04 09:24:36 2006

Quant Results File: NDMA060921.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA060921.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Fri Dec 01 10:51:15 2006

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3061m	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	126505	269.10	ug/l	0.00
Spiked Amount	20.000		Recovery	= 1345.50%		
Target Compounds						
2) N-Nitrosodimethylamine	3.30	74	33577m	184.01	ug/l	Qvalue

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC017.D

Vial: 5

Acq On : 1 Dec 2006 5:42 pm

Operator:

Sample : NDMA 100PPB S092106F

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS integration Params: rteint.p

Quant Time: Dec 4 9:27 2006

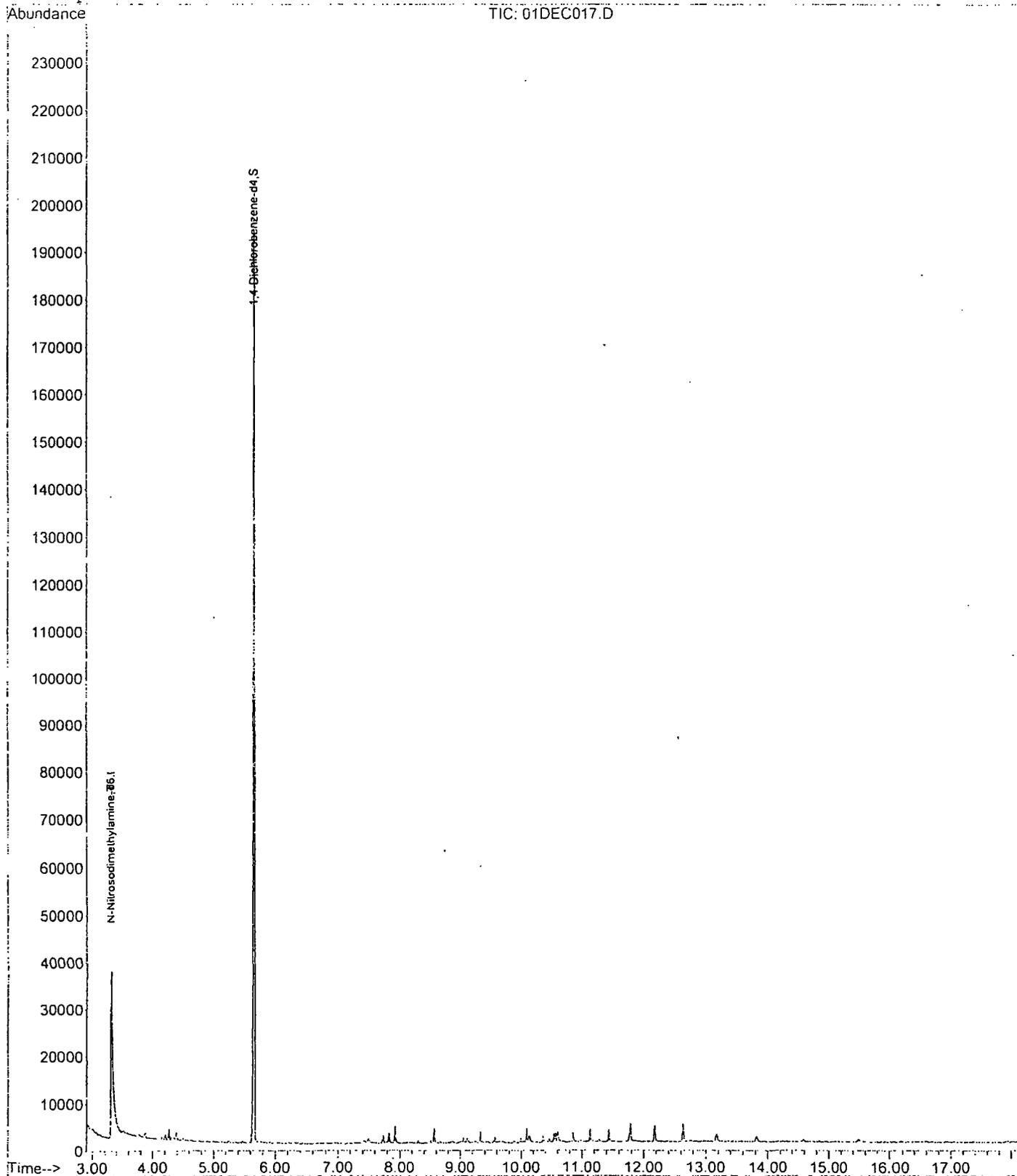
Quant Results File: NDMA060921.RES

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC020.D

Vial: 8

Acq On : 1 Dec 2006 7:01 pm

Operator:

Sample : NDMA 20-ICV S120106A

Inst : GCMS_H

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 04 09:31:51 2006

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3583m	20.00	ug/l	-0.01
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	28163	18.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	91.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.33	74	6435m	18.77	ug/l	Qvalue

Quantitation Report (QT Reviewed)

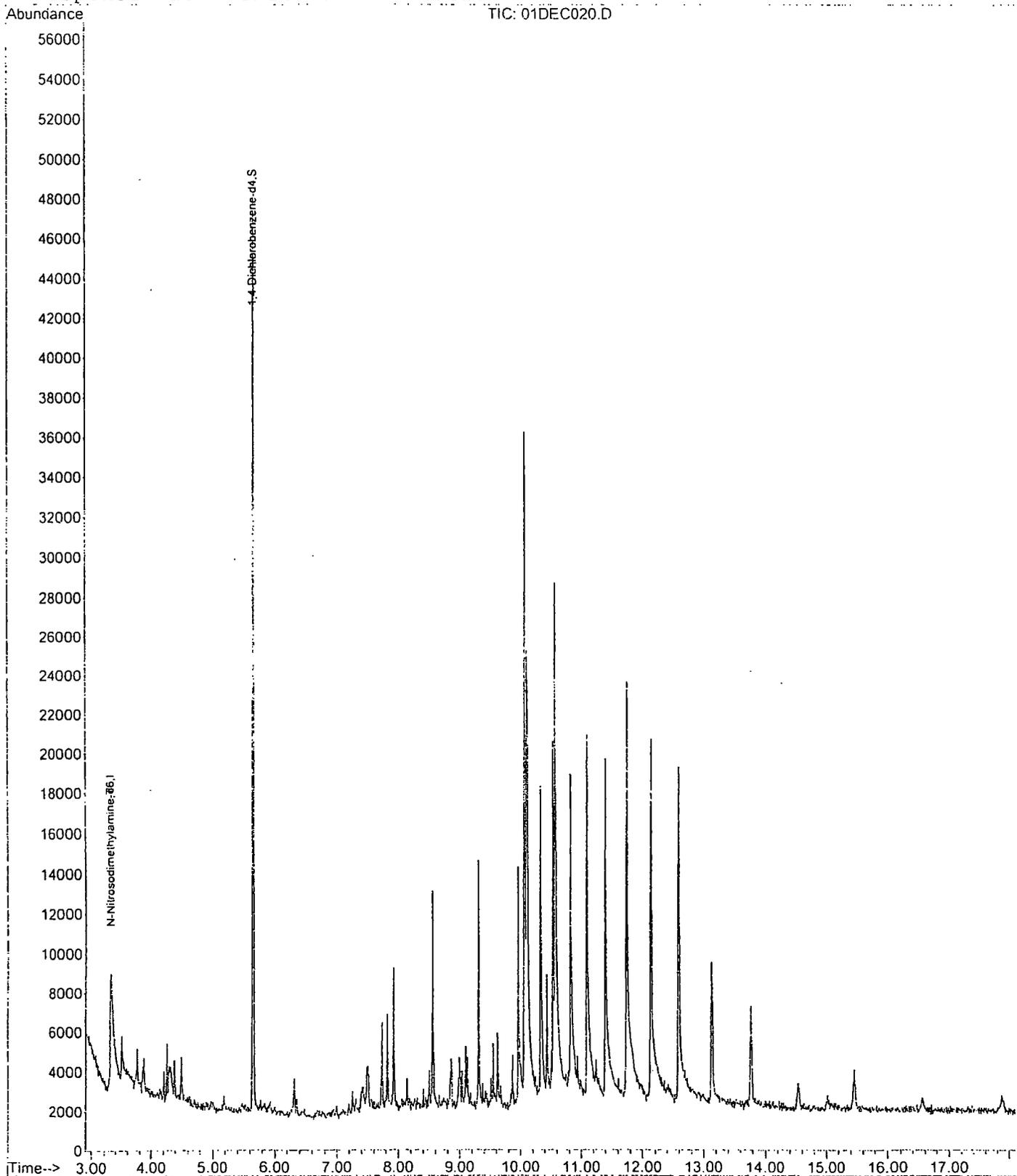
Data File : C:\MSDCHEM\1\DATA\061201\01DEC020.D
Acq On : 1 Dec 2006 7:01 pm
Sample : NDMA 20-TCV 8120106A
Misc :

Vial: 8
Operator:
Inst : GCMS II
Multiplier: 1.00

MS Integration Params: rteint.p
Quant Time: Dec 4 9:32 2006

Quant Results File: NDMA061201.RE1

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Dec 04 09:30:54 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC020.D

Vial: 0

Acq On : 1 Dec 2006 7:01 pm

Operator:

Sample : NDMA 20-ICV S120106A

Inst : GCMS_H

Multiplier: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 04 09:31:51 2006

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Mon Dec 04 09:30:54 2006

Response via : Initial Calibration

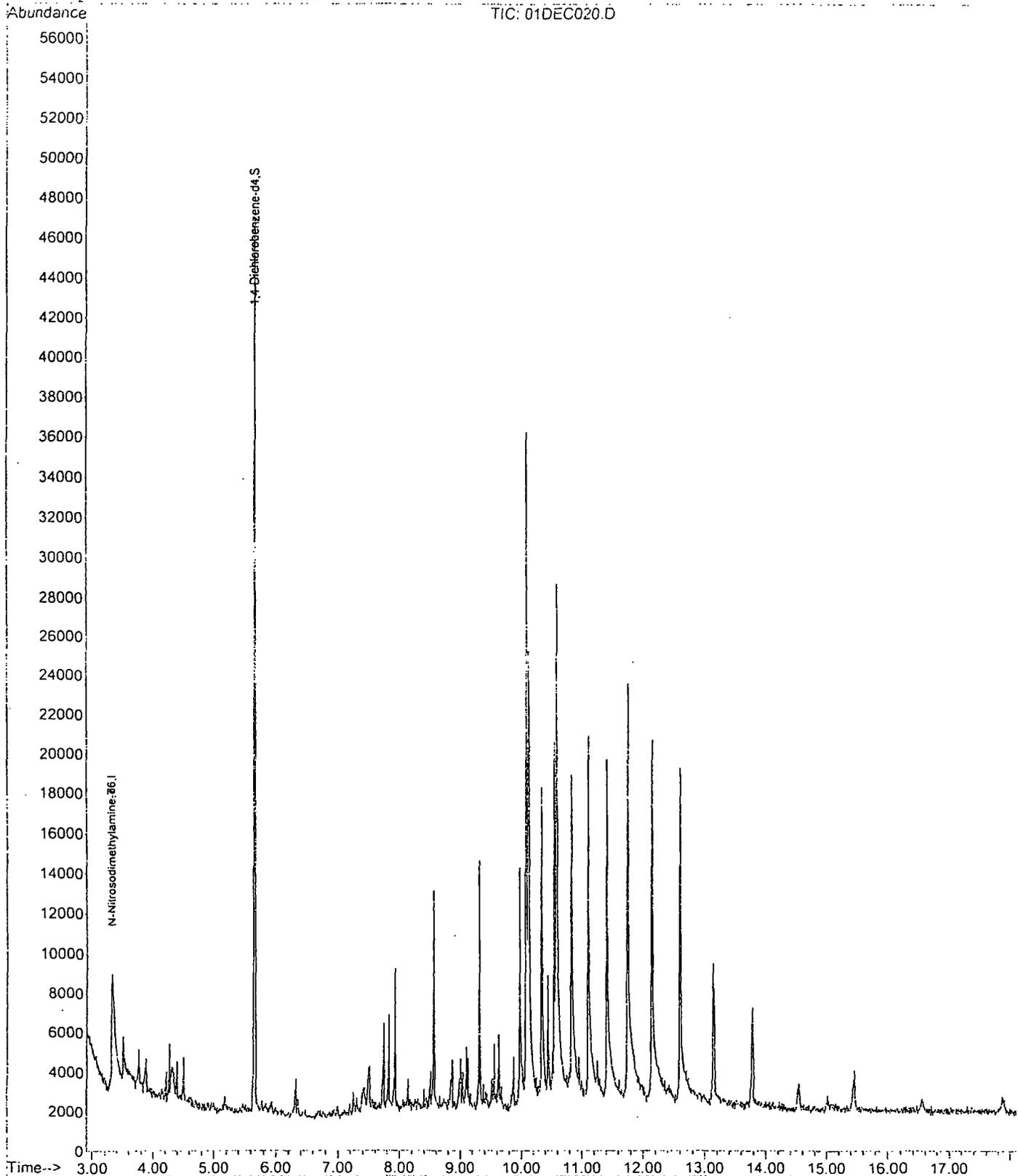
DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.31	80	3583m	20.00	ug/l	-0.01
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	28163	18.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	91.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.33	74	6435m	18.77	ug/l	Qvalue

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\061201\01DEC020.D Vial: 3
Acq On : 1 Dec 2006 7:01 pm Operator:
Sample : NDMA 20-1CV S120106A Inst : GCMS_H
Misc : Multiplic: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 4 9:32 2006 Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Dec 04 09:30:54 2006
Response via : Initial Calibration



Date File : C:\MSDCHEM\1\DATA\061201\01DEC020.D Vial: 3
 Acq On : 1 Dec 2006 7:01 pm Operator:
 Sample : NDMA 20-ICV S120106A Inst : GCMS_H
 SC Multiplic: 1.00
 Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Mon Dec 04 09:30:54 2006
 Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)
1 I	N-Nitrosodimethylamine-d6	1.000	1.000	0.0	121	-0.01
2 T	N-Nitrosodimethylamine	1.913	1.796	6.1	129	-0.02
3 S	1,4-Dichlorobenzene-d4	8.583	7.860	8.4	123	0.00

Directory: C:\MSDCHEM\1\DATA\070109

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	09JAN001.D	1.	NDMA 20PPB S121906H		9 Jan 2007 16:21
2	10	09JAN010.D	1.	NDMA MB 070108-L16		9 Jan 2007 20:18
3	11	09JAN011.D	1.	NDMA LCS 070108-L16		9 Jan 2007 20:44
4	12	09JAN012.D	1.	NDMA LCSD 070108-L16		9 Jan 2007 21:11

Line

- 1
- 2
- 3
- 4

- 1
- 2
- 3
- 4

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D Vial: 1
 Acq On : 9 Jan 2007 4:21 pm Operator:
 Sample : NDMA 20PPB S121906H Inst : GCMS_H
 SC : Multiplr: 1.00

Integration Params: rteint.p
 Quant Time: Jan 09 16:43:20 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

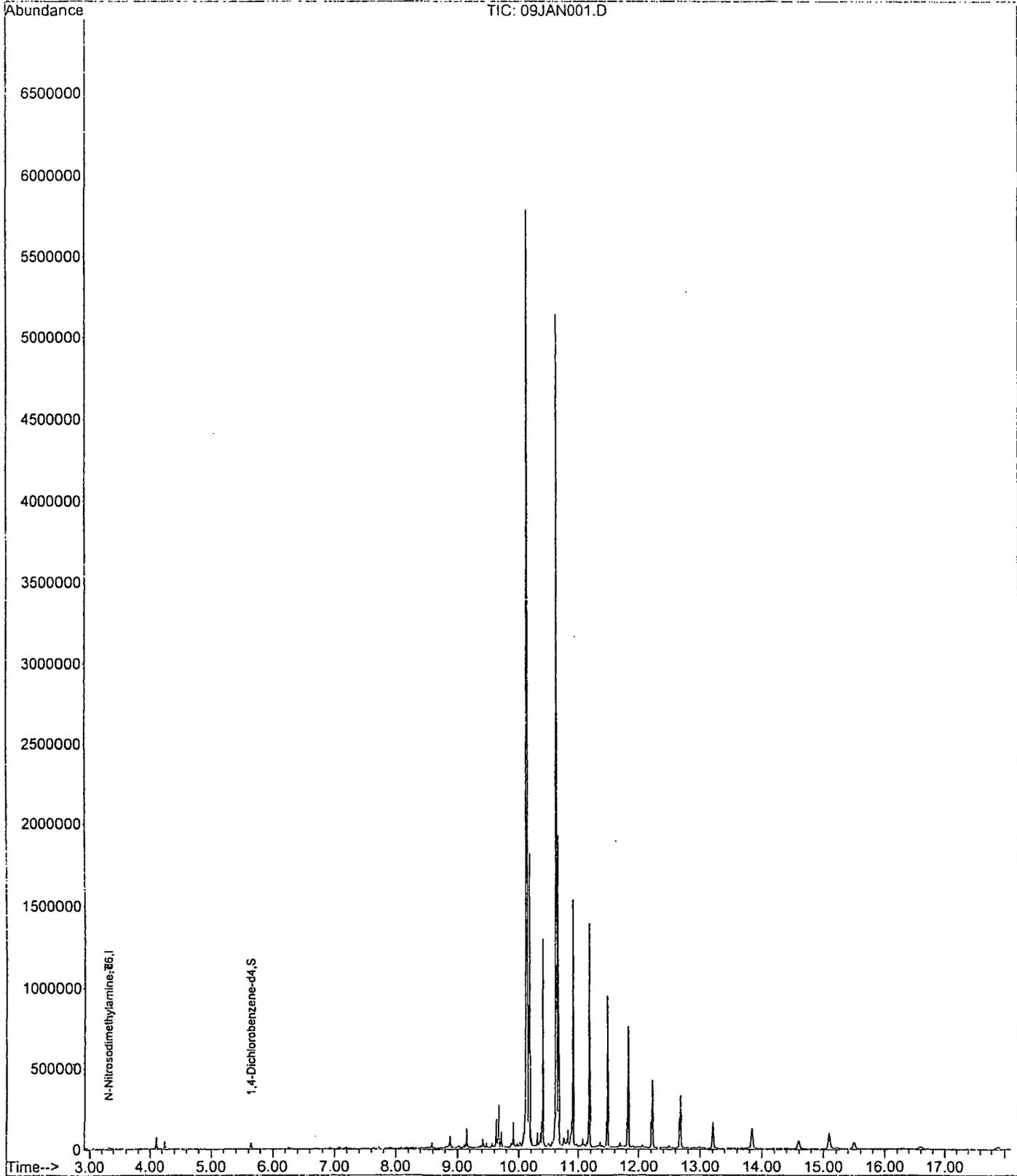
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3365m	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	23324	16.15	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	80.75%	
Target Compounds						
2) N-Nitrosodimethylamine	3.32	74	6629	20.59	ug/l	Qvalue 84

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D
Acq On : 9 Jan 2007 4:21 pm
Sample : NDMA 20PPB S121906H
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 9 16:43 2007

Vial: 1
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D Vial: 1
Acq On : 9 Jan 2007 4:21 pm Operator:
Sample : NDMA 20PPB S121906H Inst : GCMS_H
Misc : Multiplr: 1.00

S Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

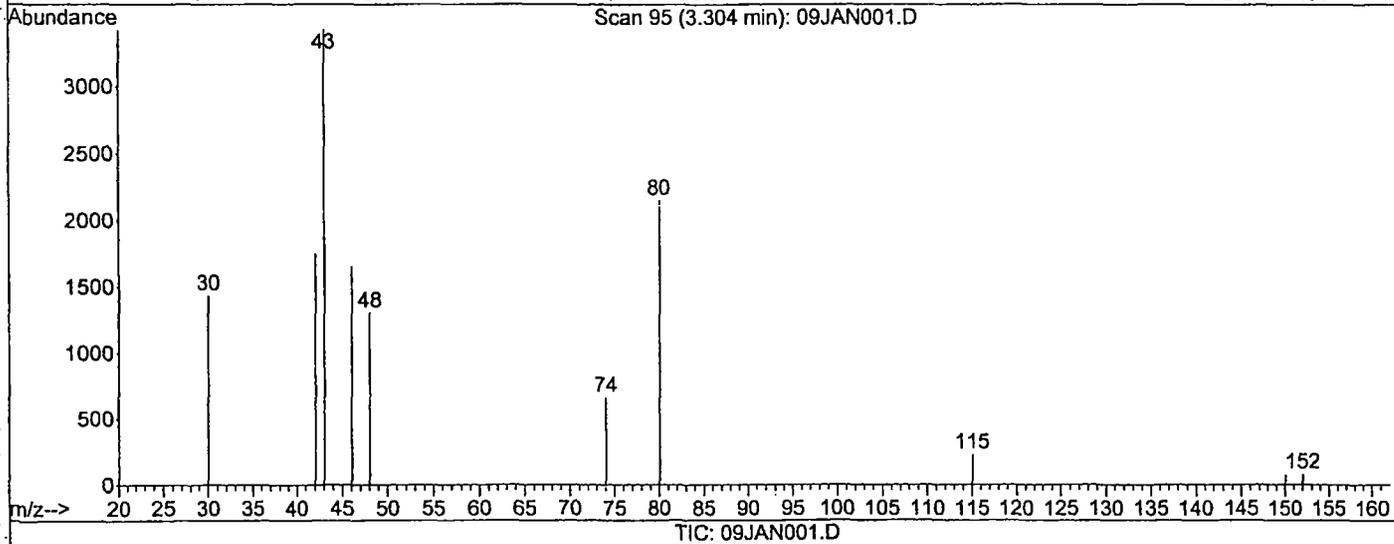
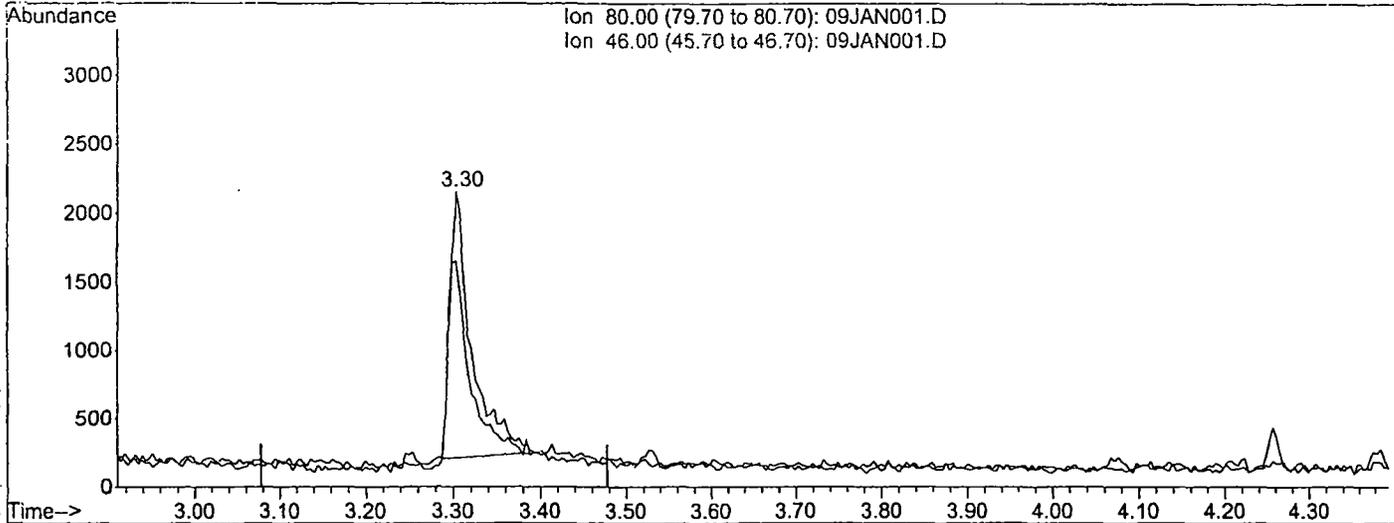
	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	N-Nitrosodimethylamine-d6	1.000	1.000	0.0	114	0.03
2 T	N-Nitrosodimethylamine	1.913	1.970	-3.0	133	0.03
3 S	1,4-Dichlorobenzene-d4	8.583	6.931	19.2	102	-0.01

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D
Acq On : 9 Jan 2007 4:21 pm
Sample : NDMA 20PPB S121906H
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 11 15:25 2007

Vial: 1
Operator:
Inst : GCMS_H
Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Single Level Calibration



(1) N-Nitrosodimethylamine-d6 (I)
20.01/11/07

3.30min 20.00ug/l m

response 3365

baseline adjustment.

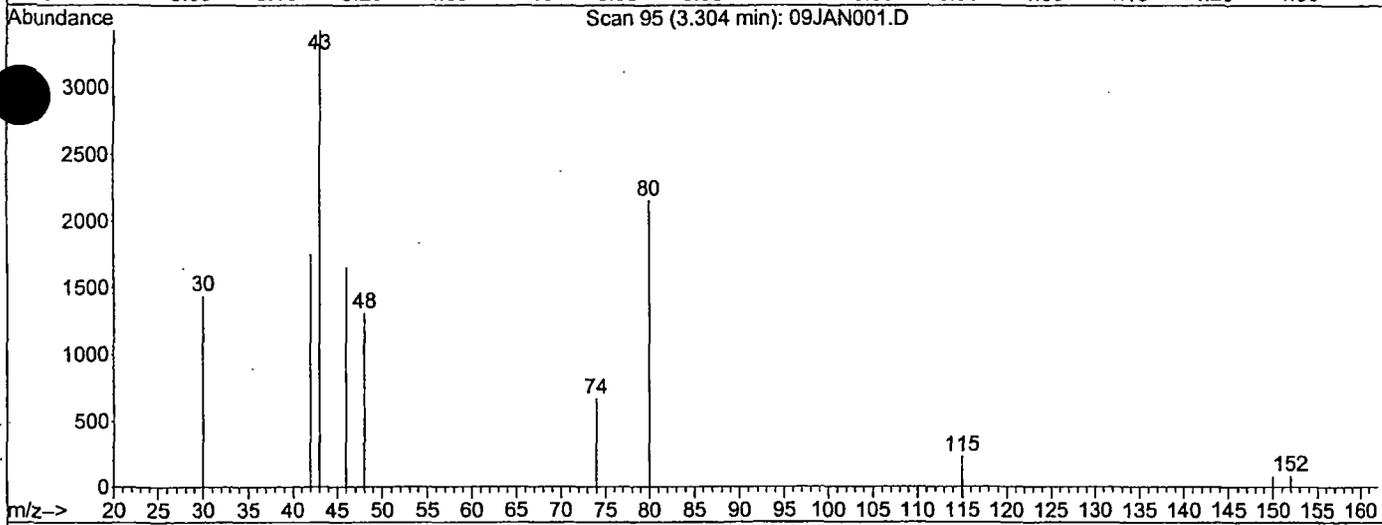
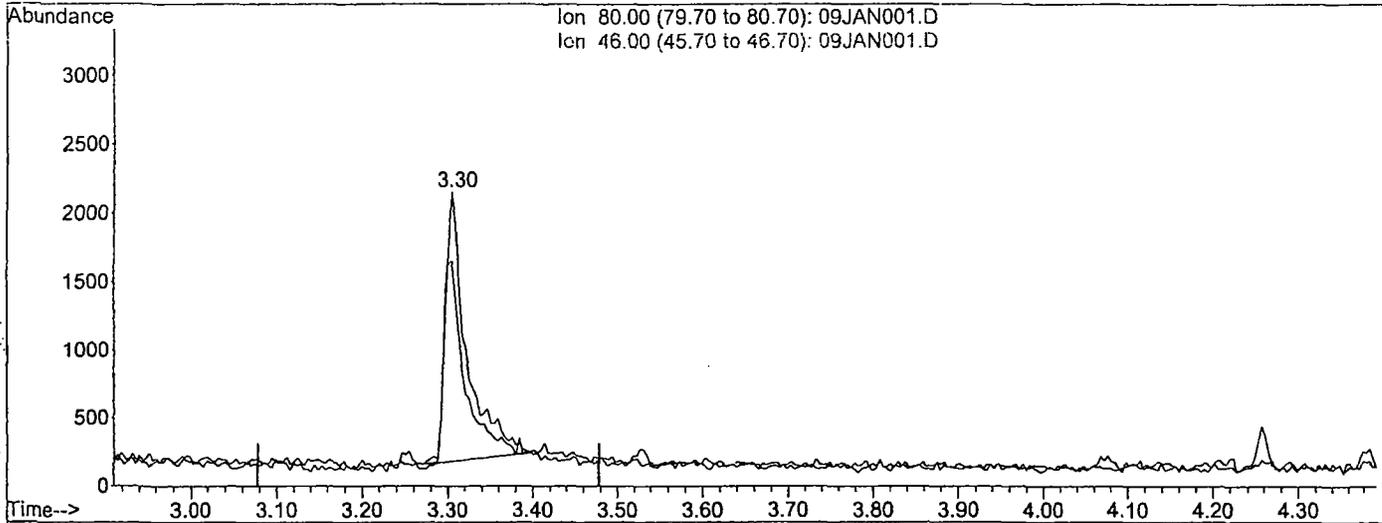
Ion	Exp%	Act%
80.00	100	100
46.00	66.00	76.82
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\070109\09JAN001.D
 Acq On : 9 Jan 2007 4:21 pm
 Sample : NDMA 20PPB S121906H
 Misc :
 Integration Params: rteint.p
 Quant Time: Jan 11 15:24 2007

Vial: 1
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Single Level Calibration



TIC: 09JAN001.D

(1) N-Nitrosodimethylamine-d6 (I)

3.30min 20.00ug/l

response 3537

Ion	Exp%	Act%
80.00	100	100
46.00	66.00	76.43
0.00	0.00	0.00
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\070109\09JAN010.D
 Acq On : 9 Jan 2007 8:18 pm
 Sample : NDMA MB 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 08:41:00 2007

Vial: 10
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.34	80	1074	20.00	ug/l	0.06
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	11943	25.91	ug/l	0.00
Spiked Amount	20.000		Recovery	=	129.55%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

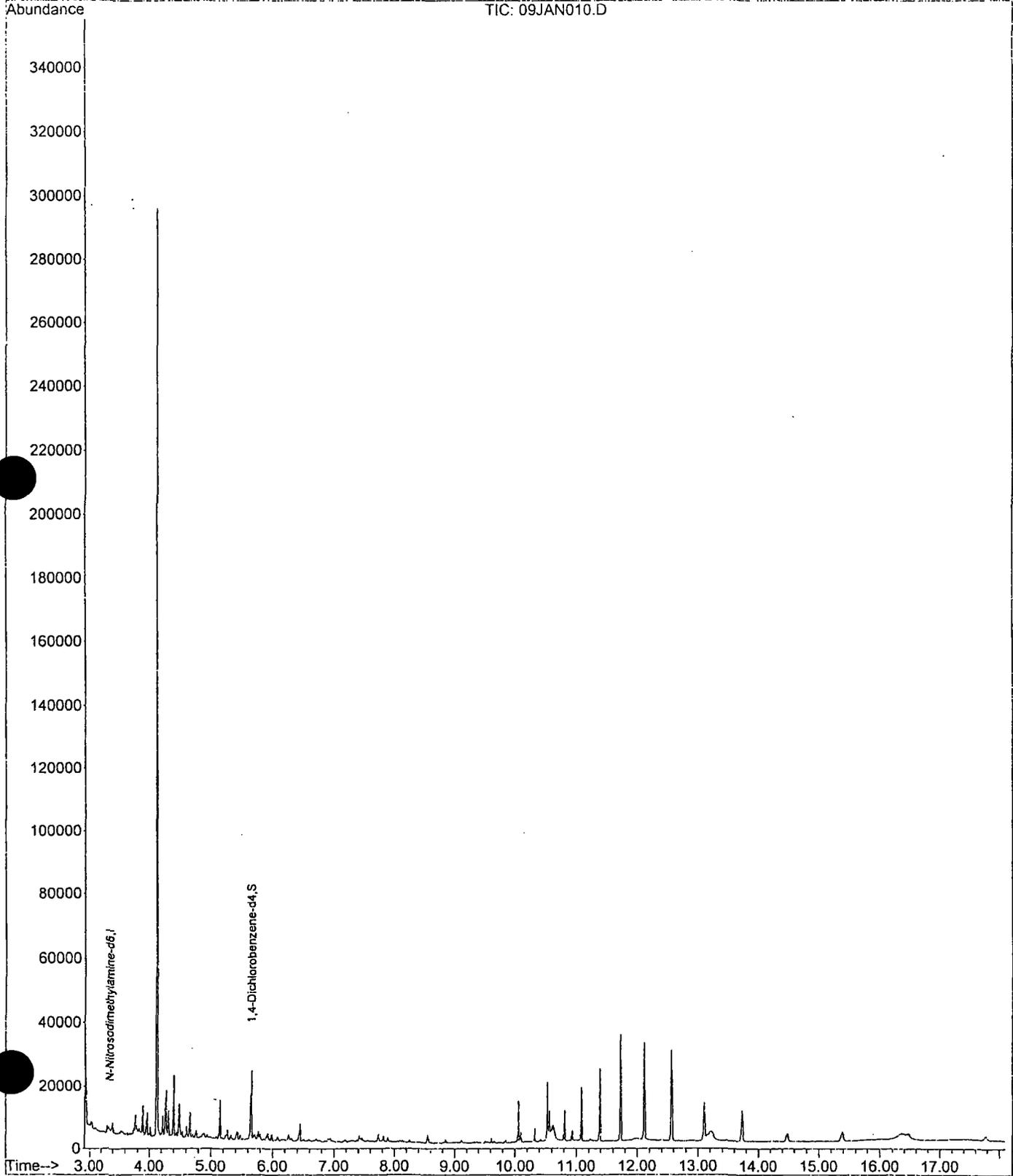
Data File : C:\MSDCHEM\1\DATA\070109\09JAN010.D
Acq On : 9 Jan 2007 8:18 pm
Sample : NDMA MB 070108-L16
Misc :

Vial: 10
Operator:
Inst : GCMS_H
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jan 10 8:41 2007

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN011.D
 Acq On : 9 Jan 2007 8:44 pm
 Sample : NDMA LCS 070108-L16
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 10 08:41:31 2007

Vial: 11
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.32	80	1633	20.00	ug/l	0.04
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	9898	14.12	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	70.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.35	74	1863	11.93	ug/l	Qvalue 89

Data File : C:\MSDCHEM\1\DATA\070109\09JAN011.D

Vial: 11

Acq On : 9 Jan 2007 8:44 pm

Operator:

Sample : NDMA LCS 070108-L16

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jan 10 8:41 2007

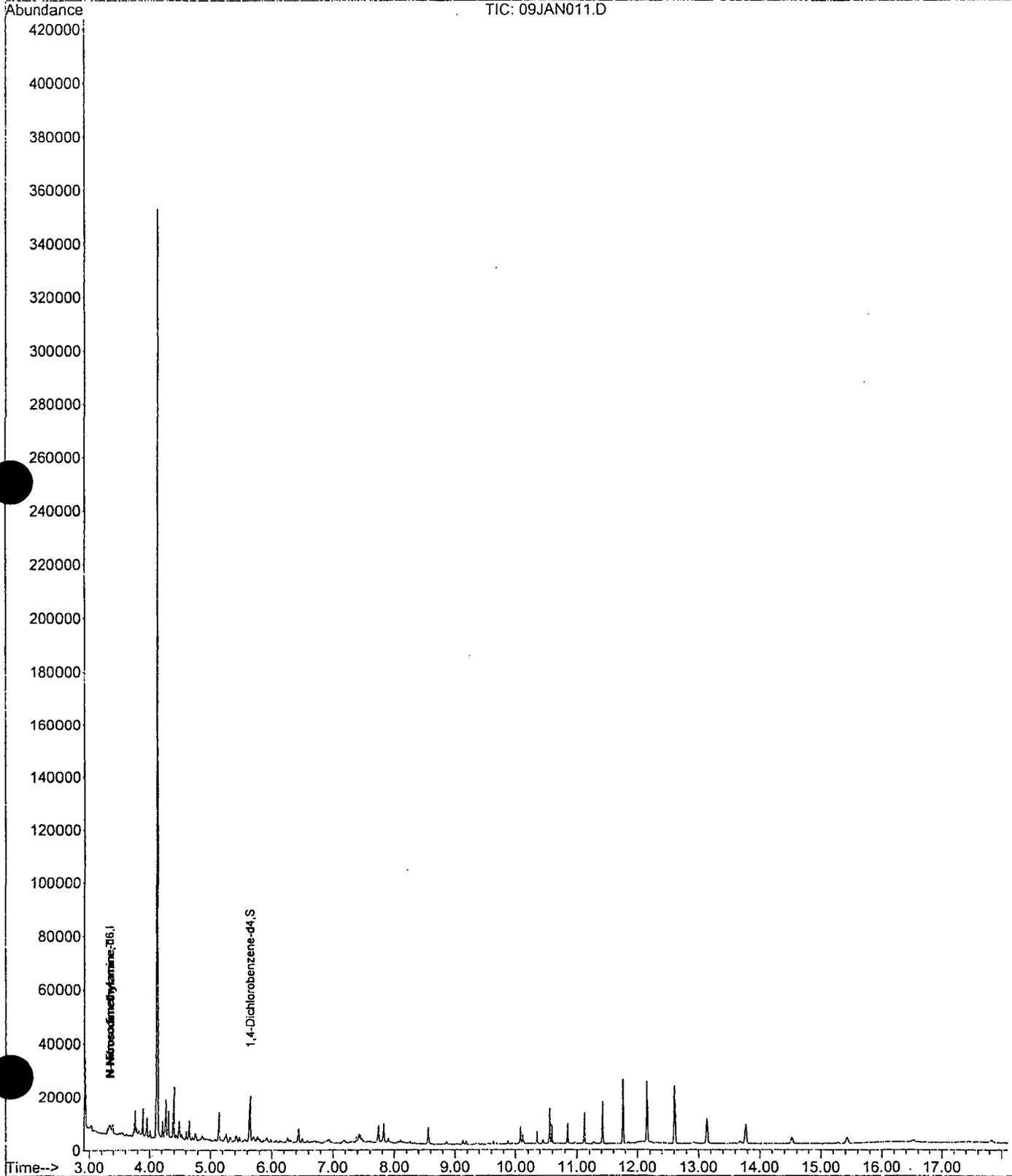
Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070109\09JAN012.D

Vial: 12

Acq On : 9 Jan 2007 9:11 pm

Operator:

Sample : NDMA LCSD 070108-L16

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jan 10 08:41:51 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.33	80	2083	20.00	ug/l	0.05
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	10123	11.32	ug/l	0.00
Spiked Amount	20.000		Recovery	=	56.60%	
Target Compounds						
2) N-Nitrosodimethylamine	3.34	74	2003	10.05	ug/l	Qvalue 86

Data File : C:\MSDCHEM\1\DATA\070109\09JAN012.D
Acq On : 9 Jan 2007 9:11 pm
Sample : NDMA LCSD 070108-L16
Misc :

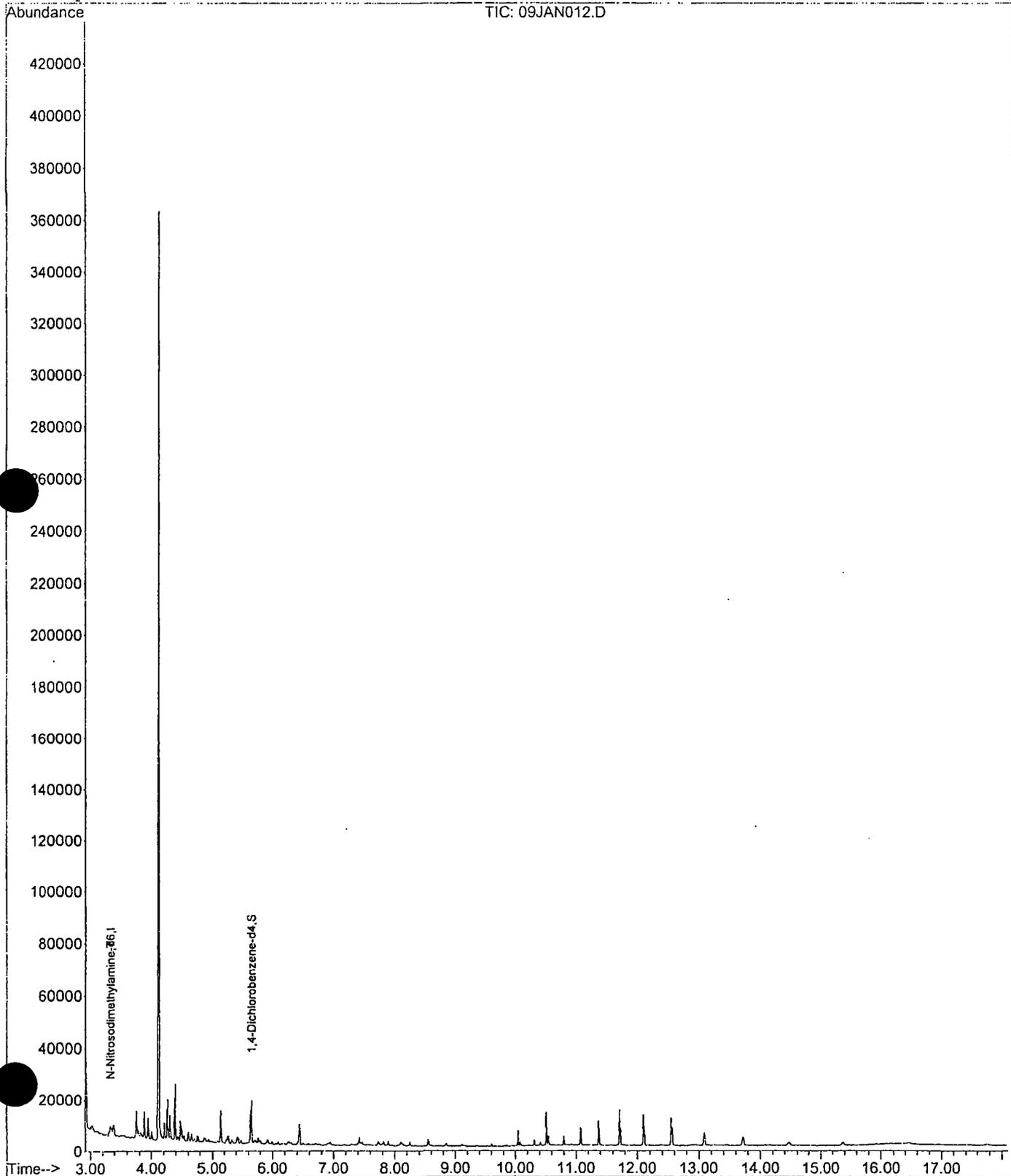
Vial: 12
Operator:
Inst : GCMS_H
Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jan 10 8:41 2007

Quant Results File: NDMA061201.RE!

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Directory: C:\MSDCHEM\1\DATA\070111

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	11JAN002.D	1.	NDMA 20PPB S121906H		11 Jan 2007 10:26
2	2	11JAN003.D	1.	01-0477-1		11 Jan 2007 11:18
3	3	11JAN004.D	1.	01-0477-2		11 Jan 2007 11:44
4	4	11JAN005.D	1.	01-0477-3		11 Jan 2007 12:10
5		11JAN006.D	1.			

070111

070111

Data File : C:\MSDCHEM\1\DATA\070111\11JAN002.D

Vial: 1

Acq On : 11 Jan 2007 10:26 am

Operator:

Sample : NDMA 20PPB S121906H

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Int Time: Jan 11 10:50:50 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Initial Calibration

DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3763	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	28244	17.49	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	87.45%	
Target Compounds						
2) N-Nitrosodimethylamine	3.32	74	8139	22.61	ug/l	Qvalue 81

Data File : C:\MSDCHEM\1\DATA\070111\11JAN002.D

Vial: 1

Acq On : 11 Jan 2007 10:26 am

Operator:

Sample : NDMA 20PPB S121906H

Inst : GCMS_H

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Jan 11 10:50 2007

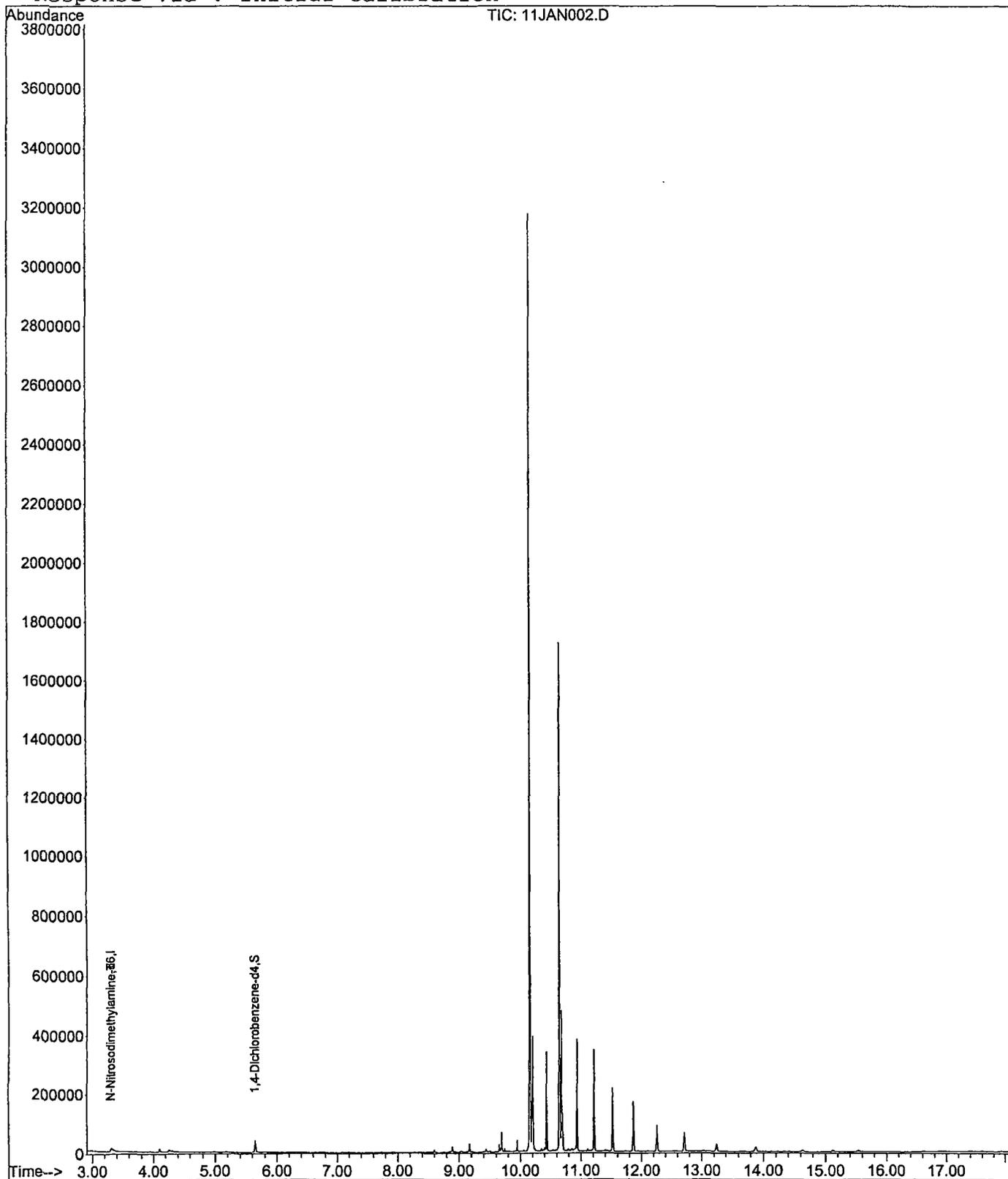
Quant Results File: NDMA061201.REV

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)

Title : CLP BNA Calibration

Last Update : Tue Jan 09 16:09:47 2007

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070111\11JAN002.D Vial: 1
 Acq On : 11 Jan 2007 10:26 am Operator:
 Sample : NDMA 20PPB S121906H Inst : GCMS_H
 Misc : Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	N-Nitrosodimethylamine-d6	1.000	1.000	0.0	128	0.03
2 T	N-Nitrosodimethylamine	1.913	2.163	-13.1	163	0.02
3 S	1,4-Dichlorobenzene-d4	8.583	7.506	12.5	124	-0.01

Data File : C:\MSDCHEM\1\DATA\070111\11JAN003.D
Acq On : 11 Jan 2007 11:18 am
Sample : 01-0477-1
Misc :

Vial: 2
Operator:
Inst : GCMS_H
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jan 11 12:38:21 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration
DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.18	80	1724	20.00	ug/l	-0.10
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	10102	13.65	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	68.25%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

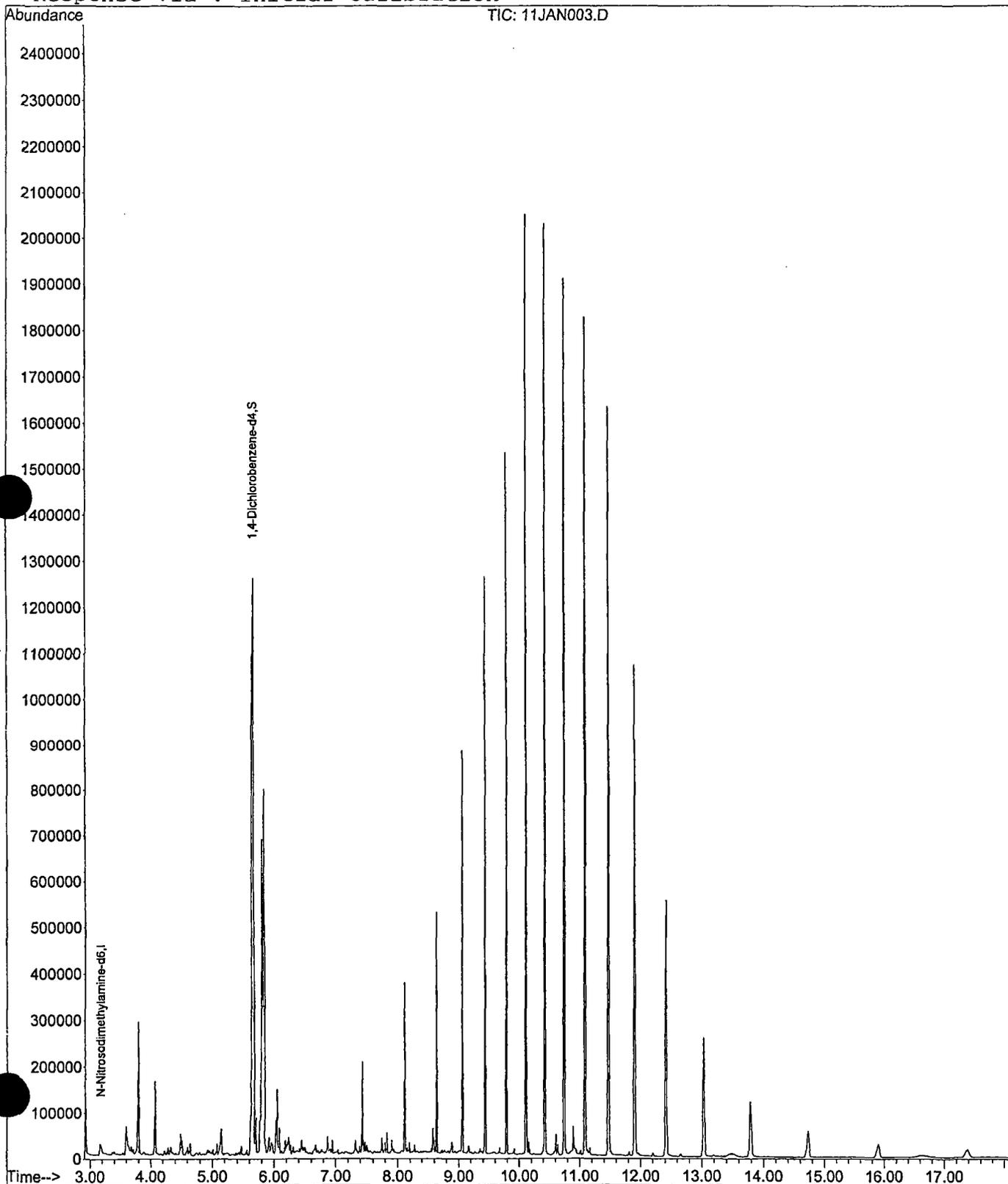
Data File : C:\MSDCHEM\1\DATA\070111\11JAN003.D
Acq On : 11 Jan 2007 11:18 am
Sample : 01-0477-1
Misc :

Vial: 2
Operator:
Inst : GCMS_H
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jan 11 12:38 2007

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070111\11JAN004.D
 Acq On : 11 Jan 2007 11:44 am
 Sample : 01-0477-2
 Misc :

Vial: 3
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jan 11 12:38:35 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) N-Nitrosodimethylamine-d6	3.30	80	3983	20.00	ug/l	0.02
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.64	150	20031	11.72	ug/l	-0.01
Spiked Amount	20.000		Recovery	=	58.60%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

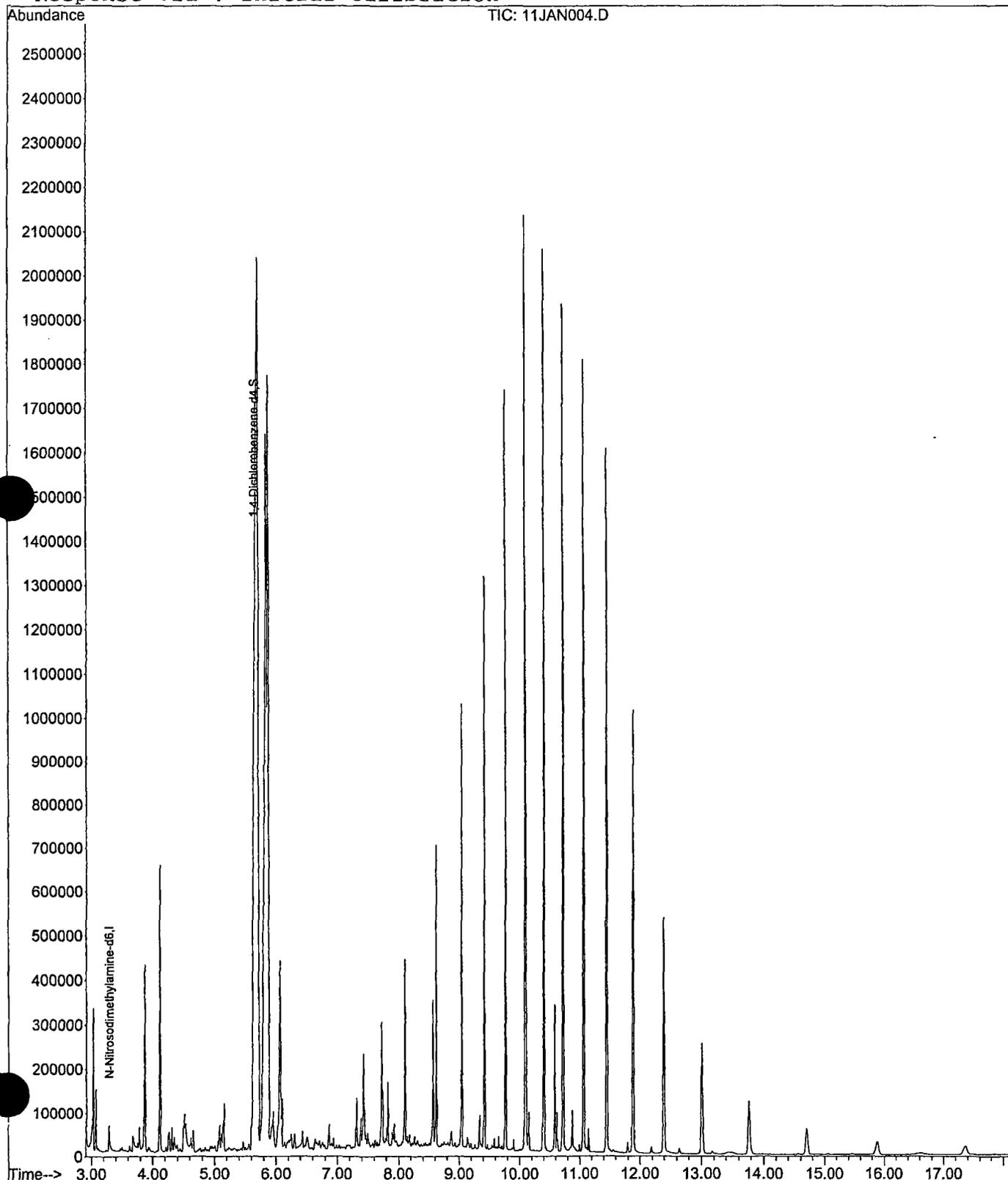
Data File : C:\MSDCHEM\1\DATA\070111\11JAN004.D
Acq On : 11 Jan 2007 11:44 am
Sample : 01-0477-2
Misc :

Vial: 3
Operator:
Inst : GCMS_H
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Jan 11 12:38 2007

Quant Results File: NDMA061201.RE:

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Tue Jan 09 16:09:47 2007
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\070111\11JAN005.D
 Acq On : 11 Jan 2007 12:10 pm
 Sample : 01-0477-3
 Misc :

Vial: 4
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Jan 11 12:37:57 2007

Quant Results File: NDMA061201.RES

Quant Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration
 DataAcq Meth : NDMASIM3

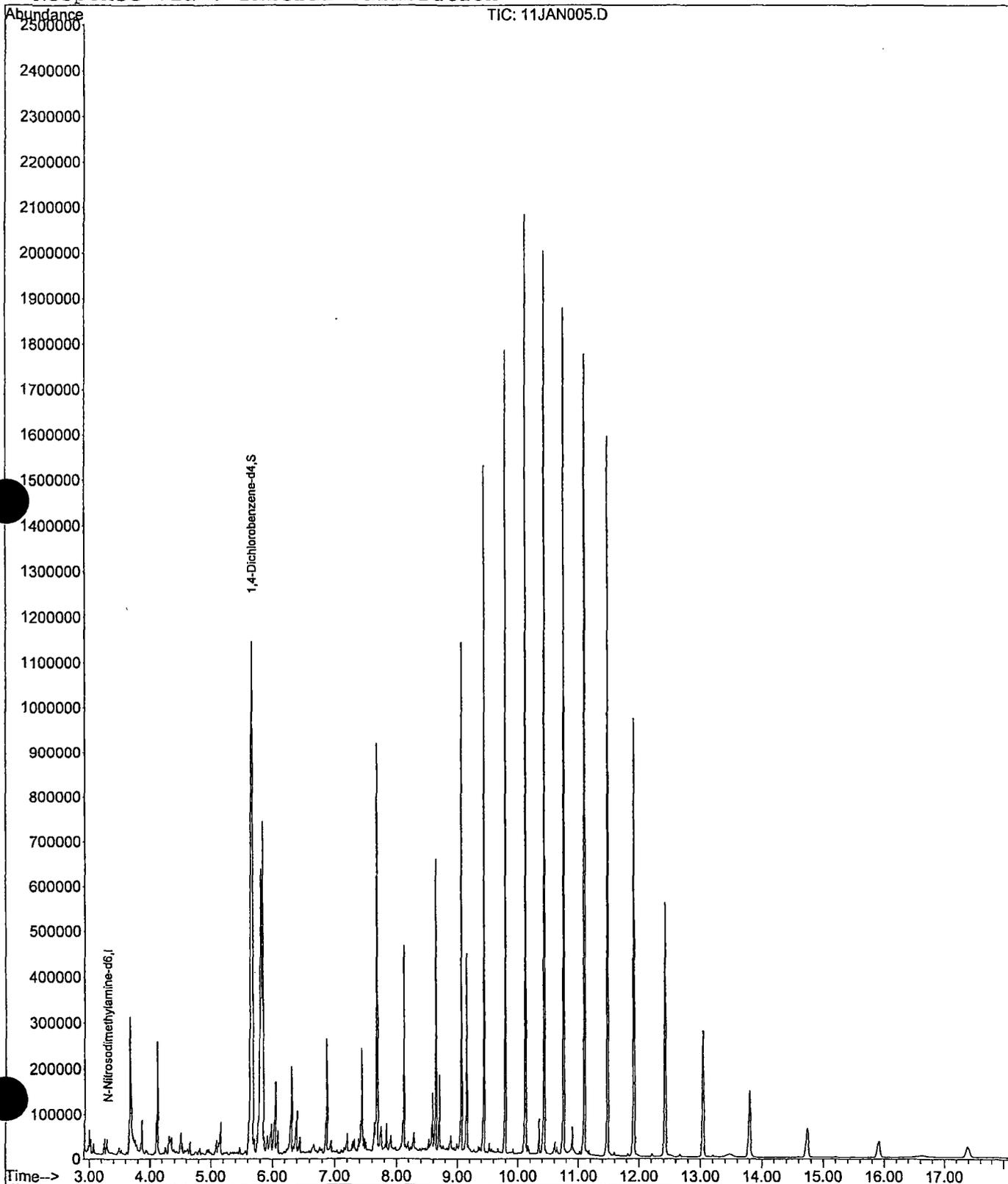
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) N-Nitrosodimethylamine-d6	3.31	80	2430	20.00	ug/l	0.03
System Monitoring Compounds						
3) 1,4-Dichlorobenzene-d4	5.65	150	17265	16.56	ug/l	0.00
Spiked Amount	20.000		Recovery	=	82.80%	
Target Compounds						
2) N-Nitrosodimethylamine	0.00	74	0	N.D.	d	Qvalue

Data File : C:\MSDCHEM\1\DATA\070111\11JAN005.D
 Acq On : 11 Jan 2007 12:10 pm
 Sample : 01-0477-3
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Jan 11 12:38 2007

Vial: 4
 Operator:
 Inst : GCMS_H
 Multiplr: 1.00

Quant Results File: NDMA061201.RE

Method : C:\MSDCHEM\1\METHODS\NDMA061201.M (RTE Integrator)
 Title : CLP BNA Calibration
 Last Update : Tue Jan 09 16:09:47 2007
 Response via : Initial Calibration



1.1 QUALITY ASSURANCE/QUALITY CONTROL SUMMARY

The Quality Assurance/Quality Control (QA/QC) Summary is the relevant QA/QC information associated with the Burbank Operational Unit sampling data set (PAC Well Samples). The QA/QC Summary contains the following two subjects, which are addressed in detail:

- Data validation concepts, rationale, and practices;
- Data quality objectives, evaluation, and implications; and

1.1.1 SELECTED DEFINITIONS/CRITERIA OF TERMS

1.1.1.1 Holding Times

The U. S. Environmental Protection Agency (U.S. EPA) has established maximum time intervals (holding times) between the collection, extraction, and analysis of samples. All compliant results must be obtained within holding times or the results are considered deficient. Samples analyzed outside of holding times must be qualified.

1.1.1.2 Laboratory and Field Blanks

Laboratory and field blanks are samples used to determine if environmental sample results may be positively biased by laboratory or field contamination. Laboratory blank results indicate contamination due to laboratory operations only, while field blank results indicate contamination from field and/or laboratory operations. Laboratory blanks contaminated above the Practical Quantitation Limit (PQL) indicate a need for corrective action.

1.1.1.3 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike samples are environmental samples that are spiked with known concentrations of target analytes. The recovery of the target analytes is used to evaluate the effects of the sample matrix. Matrix effects are considered site specific. One MS/MSD sample is analyzed for every 20 environmental samples. The matrix spike duplicate results may be compared to the matrix spike results in order to determine precision.

1.1.1.4 Laboratory Control Sample (LCS)

The LCS determines if the analytical system is in control and consists of reagent grade (analyte free) water spiked with known concentrations of target analytes. Results from the LCS are considered free of any matrix effects and analyte recoveries outside control limits are used to qualify data.

1.1.1.5 Surrogates

For most methods, surrogate compounds are added to every sample at the beginning of sample preparation and are used to monitor the analytical process and give information concerning matrix effects. Surrogate recoveries are the single most useful QC entity for evaluating environmental analytical data. The ubiquitous use of surrogates in the analytical methods has afforded a large database of results from which useful correlated information can be extracted. Surrogates are chemically similar to target analytes and their

recovery within control limits indicates the process is in control. Surrogates are the primary indicators of matrix effects.

1.1.1.6 Second Column Confirmation

All organic analysis that results in analyte detection should be confirmed in order to have confidence in the result. In the case of gas chromatography/mass spectrometry (GC/MS) analysis, analyte peaks at the correct retention time are confirmed by the mass spectra. For GC or high performance liquid chromatography (HPLC) analysis, a second analytical column and/or a second detector is used for to confirm the presence of the analyte. Unless an analyte is confirmed, its presence cannot be proved.

1.1.1.7 Temperature Blanks

Temperature blanks are placed in coolers with environmental samples in order to determine the temperature of the samples when they arrive at the lab. Temperature blanks typically consist of water in a container similar to the sample containers. Upon receipt at the lab, the temperature blanks are opened and a thermometer is inserted directly into the liquid. Alternatively, the temperature of the samples is measured using an infrared thermometer. The criterion is 4 degrees Celsius, plus or minus 2 degrees. Samples that arrive at the laboratory shortly after sample collection (less than 4 hours) may not have sufficient time for temperature equilibration. In these cases, samples may exceed the upper temperature limit of 6 degrees Celsius, but must be below ambient temperatures.

1.1.1.8 Field Audits

Field audits determine if the sampling procedures used by the field crew are in accordance with standard operating procedures. The techniques used to collect the samples are analyzed to determine if the samples are being collected correctly.

1.1.1.9 Sample Delivery Group (SDG)

The SDG is a laboratory-defined collection of sample results together with the corresponding quality control results. These results are organized under a unique group heading. The laboratory determines the method of grouping the sample results under an SDG and each SDG may contain samples collected at various times and with different matrix types. Generally, each SDG consists of the results for a group of samples received by the laboratory on a single day.

1.1.1.10 Data Gaps

Data gaps may be generated by both field sampling activities and laboratory data problems. Field activities that may produce data gaps include difficulty accessing the sampling location, which results in no sample being collected, or damage and subsequent loss of samples before they reach the laboratory. Laboratory QC errors resulting in data that must be qualified as rejected will also leave data gaps in the analytical results. If necessary, data gaps may be closed quickly by resampling and reanalysis. If the results are not time critical, the gap may be closed during the next quarter of sampling.

1.1.1.11 Corrective Actions

Corrective actions are performed in response to data or conditions that are not in analytical control. Corrective actions are performed in an attempt to bring the error condition back under control. Corrective actions are documented by a corrective action report (CAR) and are included in the laboratory's SDG data package.

1.1.2 DATA VALIDATION RATIONALE AND GUIDELINES

1.1.2.1 Controlling Documents

The following documents were used for data validation.

- USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (Publication OSWER 9240.1-05A-P, EPA-540/R-99/008, October 1999); and
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (Publication OSWER 9240.1-35, EPA-540/R-01/008, July 2002).

These two documents are hereinafter collectively referred to as the National Functional Guidelines.

1.1.2.2 Data Validation Theory and Matrix Effects

The practice of data validation in the environmental organic chemistry field has been the subject of debate for many years. Determining the validity of environmental data results when matrix effects are suspected is not an exact science, and professional judgment concerning matrix effects is used to help guide the data to its best logical interpretation and evaluation.

The overall QC of environmental sample analysis can be divided into two main categories. These categories are generally considered to be "method QC" and "instrument QC." Both types of QC operate independently to validate the data and qualify the results.

Instrument QC parameters are often well defined and well understood and are based on the tangible physical laws of analytical instrumentation. Instrument QC parameters have to do with (but are not limited to) the calibration, chromatography, and detection aspects of environmental data analysis. Instrument QC parameters are considered independent from a sample's matrix and/or matrix effects.

Conversely, method QC parameters do not yield results that are as well defined, since they are based in part on problems associated with the intangible and/or unknown effects of the sample matrix. Method QC parameters have to do with (but are not limited to) the spiking, extraction, and spike recovery aspects of environmental data analysis. Method QC parameters are considered dependent on a sample's matrix and/or matrix effects.

When evaluating environmental data results with pronounced or unknown matrix effects, a conservative approach to the validation is required. The method QC parameters are rigidly applied and validations are conferred to entire data sets based on one sample's bias.

1.1.2.3 Data Validation Rationale

The *National Functional Guidelines* were written for use with the Contract Laboratory Program (CLP) methods as outlined in the CLP Statement of Work (SOW). The SOW contains methods for volatile and semivolatile GC/MS analysis, two-column GC pesticide analysis, and inductively coupled plasma (ICP) metal analysis. These methods do not differ significantly in the application of the basic quality control parameters from those found in the corresponding SW846 methods for volatile, semivolatile, pesticide, and ICP metals analyses (hereafter referred to as the SW methods). The target compounds in the CLP are a subset of the SW846 target compounds.

Since the CLP methods and the SW846 methods have similar QC instructions, the *National Functional Guidelines* are usable for the SW methods. In order to validate analytical methods that have no corresponding CLP method validation guidance, logical extrapolations are determined by modeling the pertinent CLP rationale. The resulting validated data have a professional judgment component that allows the validation to be tailored to the individual project. Since the validation of environmental results is not an exact science, interpretive judgments are sometimes required for complex data.

1.1.2.4 Validation Qualifiers

- B: The sample result is less than 5 times (10 times for common organic laboratory contaminants) the blank contamination. The result is considered not to have originated from the environmental sample, because cross-contamination is suspected.
- J: The analyte was positively identified and the result is usable; however, the analyte concentration is an estimated value.
- R: The sample result is rejected and not usable for any purpose. The presence or absence of the analyte cannot be verified.
- U: The analyte was not detected at or above the reporting detection limit (RDL).
- UJ: The analyte was not detected above the MDL; however, the MDL is uncertain and may be elevated above normal levels.
- Y: Confirmation column results indicate a non-detect for the target analyte.

1.1.2.5 Qualifier Descriptors

- a: The analyte was found in the method blank.
- b: The surrogate spike recovery was outside quality control criteria.
- c: The MS and/or MSD recoveries were outside control limits.
- d: The laboratory control sample recovery was outside control limits.
- e: A holding time violation occurred.
- f: The duplicate/replicate sample's relative percent difference (RPD) was outside the control limit.
- g: The data met prescribed criteria as detailed in the QAPP.
- h: The required second column confirmation was not performed.
- k: The analyte was found in a field blank.
- l: The second column confirmation result indicates the analyte was not confirmed.
- n: The laboratory case narrative indicated a QC problem.
- p: Professional judgment determined the data should be qualified.
- q: The analyte detection was below the PQL.
- r: The result is above the instrument's calibration range.
- t: The temperature was outside acceptance criteria.

1.1.2.6 Level One Validation Guidelines

Organic Validation Guidelines

Sample Preservation

- As a rule, all samples are required to be preserved at a temperature of 4 degrees Celsius, plus or minus 2 degrees. Additional preservation criteria are method specific. The temperature criterion applies to all samples.
- Samples placed in a cooler and transported directly to the laboratory with short transit times (less than 4 hours) do not allow for temperature equilibration. The temperature of samples with short transit time must be below ambient temperature with evidence of cooling in progress (ice or ice-substitute present).

- Samples with temperatures in excess of six degrees Celsius but less than or equal to 12 degrees Celsius are qualified **J** for detected analytes and **UJ** for non-detects.
- Samples in gross excess (>12 degrees) of the temperature criteria are qualified **J** for detected analytes and non-detects are qualified **R**.
- The descriptor **t** is used to indicate sample temperature qualification.

Holding Times

- For volatile organic analyses (VOA) samples, analysis after 14 days (7 days if not pH preserved) from collection are qualified **J** and **UJ**.
- For semivolatile (SV) samples, water samples extracted after 7 days (14 days for soil) are qualified **J** and **UJ**. Samples analyzed after 40 days from extraction are also qualified **J** and **UJ**.
- If holding times are grossly exceeded (greater than 2 times the normal holding time), then positive results are qualified **J** and non-detects are qualified **R**.
- The descriptor **e** is used to denote holding time violations.

Blanks

- Analytes found in associated environmental samples at or below 5 times (10 times common organic analytes) of the method or field blank analyte concentrations are qualified **B**.
- The descriptor **a** is used to indicate method blank contamination.
- The descriptor **k** is used to indicate field blank contamination.

Surrogates

- For VOA (GC/MS) samples, there are three cases. Any single surrogate failure will cause qualification.
 - Case #1: Recovery above upper limit, then **J** qualify detected analytes. Do not qualify non-detected analytes.
 - Case #2: Recovery between lower limit and 10 percent, then **J** and **UJ**.
 - Case #3: Recovery below 10 percent, then **J** positive results and **R** non-detects.
- For SV (GC/MS) samples, there are four cases. Except for case four, two surrogate failures (within each fraction) will cause fraction specific qualification.
 - Case #1: Recovery above upper limit, then **J** only. No **UJ**.

- Case #2: Recovery between lower limit and 10 percent, then **J** and **UJ**.
- Case #3: Recovery of one surrogate above upper limit and one surrogate below the lower limit but above 10 percent, then qualify as in case #2.
- Case #4: Any one surrogate below 10 percent, then **J** positive results and **R** non-detects.
- For SV (GC) samples.
 - Case #1: Recovery above upper limit, then **J** only positive results. Non-detects are not qualified.
 - Case #2: Recovery between lower limit and 10 percent, then **J** positive results. Non-detects are qualified **UJ**.
 - Case #3: Recovery below 10 percent, then **J** positive results and **R** non-detects.
- The descriptor **b** is used to indicate surrogate failure qualification.

Laboratory Control Sample

- For laboratory control sample (LCS) qualifications, the specific analytes spiked into the LCS sample must always be qualified. All target analytes are spiked into the LCS.
- For all methods requiring LCS recoveries there are 2 cases.
 - Case #1: LCS recovery is above upper limit, then **J** detected analytes only. Do not qualify non-detects.
 - Case #2: LCS recovery is below lower limit then **J** positive results and **R** non-detects.
- The descriptor **d** is used to indicate LCS qualification.

Matrix Spike/Matrix Spike Duplicates

- The target analytes spiked into the MS/MSD are listed in the project specific QAPP.
- There are two cases for qualification based on the MS/MSD results.
 - Case #1: Non-compliant spike recoveries comprise the first case for qualification based on MS/MSD results. MS and MSD spike recoveries outside of control limits, where the LCS demonstrates that the analytical system was in control, are attributed to the effects of the sample matrix. If both the MS and MSD fail spike recovery criteria as indicated below, qualify based on the least compliant recovery.

- Recovery above upper limit, then **J** detected compounds only. Do not qualify non-detects.
- Recovery between lower limit and 10 percent, then **J** detected compounds and **UJ** non-detects.
- Recovery below 10 percent, then **J** detected compounds and **R** non-detects.
- Case #2: Non-compliance of the RPD value is the second case for qualification of data based on the MS/MSD results. MS/MSD RPDs are calculated from the analyte concentrations of the MS and MSD. If the RPD is outside the control limit, the precision is in question, and the accuracy is compromised.
 - RPD outside the control limit, then qualify the related samples with **J** for detected compounds and **UJ** non-detects.
- The descriptor **c** is used to indicate MS/MSD qualification based on the percent recovery of the spiked analytes.
- The descriptor **f** is used to indicate RPD failure.

Second Column Confirmation

For certain GC or HPLC methods, second column/detector confirmation is required for detected analytes. Refer to the relevant QAPP for method and analyte specific requirements.

Second column results are used to confirm the actual presence or absence of a target analyte. U.S. EPA guidelines state "If the qualitative criteria for both columns were not met, all target compounds that are reported detected should be considered non-detected." Therefore, any compound detection on only one column is not considered a target compound hit.

- For the situation where a compound was detected on the primary column and not detected on the confirmation column, consider the value reported to be not detected. Qualify the result with **Y** and use the **I** descriptor.
- In the case of a detection on the primary column where the required second column confirmation was not performed, then qualify the result with **R** and use the **h** descriptor.

Field Duplicate Samples

Field duplicate samples are collected to assess the precision of the sample collection and laboratory analytical process. As a rule, both the sample and its duplicate result must be at or above the PQL in order to calculate a meaningful RPD and if both results are below the PQL the RPD is not calculated. However, if one result is below the PQL (assume zero for a non-detect) and the other result significantly above (10 times) the PQL a RPD is calculated. If the RPD is outside the control limit, the precision is in question, and the accuracy is compromised. The qualification resulting from the

sample and its duplicate non-compliant RPD apply only to the sample and its duplicate and is analyte specific.

- If the RPD is outside the control limit, then qualify the sample and its duplicate with **J** for detected compounds and **UJ** non-detects.
- The descriptor **f** is used to indicate RPD failure.

Inorganic Validation Guidelines

Sample Preservation

- As a rule, all samples are required to be preserved at a temperature of 4 degrees Celsius, plus or minus 2 degrees. Additional preservation criteria are method-specific. The temperature criterion applies to all samples except ICP metals and mercury in a water matrix, which are exempt from temperature preservation.
- Samples placed in a cooler and transported directly to the laboratory with short transit times (less than 4 hours) do not allow for temperature equilibration. The temperature of samples with short transit time must be below ambient temperature with evidence of cooling in progress (ice or ice-substitute present).
- Samples with temperatures in excess of six degrees Celsius but less than or equal to 12 degrees Celsius are qualified **J** for detected analytes and **UJ** for non-detects.
- Samples in gross excess (more than 12 degrees) of the temperature criteria are qualified **J** for detected analytes and non-detects are qualified **R**.
- The descriptor **t** is used to indicate sample temperature qualification.

Holding Times

- Holding times are measured from the sampling date.
- Holding times for inorganic compounds vary from 24 hours for analyses such as chromium VI and pH to six months for ICP metals. Results produced from analyses performed beyond the holding time are qualified as estimated **J** for detected values and **UJ** for nondetects.
- If holding times are grossly exceeded (greater than 2 times the normal holding time), then positive results are qualified **J** and non-detects are qualified **R**.
- The descriptor **e** is used to denote holding time violations.

Blanks

- Equipment blanks and/or laboratory blanks are evaluated for contaminants.

- Analytes found in associated environmental samples at or below 5 times the blank analyte contamination are qualified **B**.
- Analytes qualified for laboratory blank contamination are denoted with a descriptor **a**.
- Analytes qualified for equipment blank contamination are denoted with a descriptor **k**.

Laboratory Control Sample

- For LCS qualifications, the specific analytes spiked into the LCS sample must always be qualified. All target analytes are spiked into the LCS.
- LCS recovery is above upper limit then **J** detected analytes only. Do not qualify non-detects.
- LCS recovery is below lower limit then **J** positive results and **R** non-detects.
- Analytes qualified for LCS failure are denoted with a descriptor **d**.

Matrix Spike/Matrix Spike Duplicate

The target analytes spiked into the MS/MSD are listed in the project specific QAPP. Each specific MS or MSD spiking analyte that fails recovery criteria produces qualification of the matching analyte in the site associated environmental samples. Where both the MS and MSD fail criteria, qualify based on the least compliant recovery.

- MS/MSD recovery results are not used for qualification if the analyte concentration in the environmental sample used for the MS/MSD exceeds the spike concentration by a factor of 4 or more.
- If the MS and/or MSD recovery exceed the upper control limit, then **J** detected compounds only. Do not qualify non-detected compounds.
- If the MS and/or MSD recovery falls between the lower limit and 10 percent, then **J** detected compounds and **UJ** non-detects.
- If the MS or MSD recovery is less than 10 percent, then **J** detected analytes and **R** non-detected analytes.
- The descriptor **c** is used to indicate MS/MSD qualification based on the percent recovery of the spiked analytes.
- MS/MSD RPDs are calculated from the analyte concentrations of the MS and MSD. If the RPD is outside the control limit, the precision is in question, and the accuracy is compromised.
- MS/MSD RPD results are not used for qualification if the analyte concentration in the environmental sample used for the MS/MSD exceeds the spike concentration by a factor of 4 or more.

- RPD outside the control limit, then qualify the related sample results with **J** for detected compounds and **UJ** non-detects.
- The descriptor **f** is used to indicate RPD failure.

Field Duplicate Samples

Field duplicate samples are collected to assess the precision of the sample collection and laboratory analytical process. As a rule, both the sample and its duplicate result must be at or above the PQL in order to calculate a meaningful RPD and if both results are below the PQL, the RPD is not calculated. However, if one result is below the PQL (assume zero for a non-detect) and the other result significantly above (10 times) the PQL a RPD is calculated. If the RPD is outside the control limit, the precision is in question, and the accuracy is compromised. The qualification resulting from the sample and its duplicate non-compliant RPD apply only to the sample and its duplicate and is analyte specific.

- If the RPD is outside the control limit, then qualify the sample and its duplicate with **J** for detected compounds and **UJ** non-detects.
- The descriptor **f** is used to indicate RPD failure.

1.1.3 SUMMARY OF DATA QUALITY OBJECTIVES AND COMPLIANCE

1.1.3.1 Data Quality Objectives

Data quality objectives (DQOs) are qualitative and quantitative statements developed by data users to specify the quality of data from field and laboratory data collection activities. These DQOs must be carefully designed to support specific decisions or regulatory actions. The DQOs describe which data are needed, why the data are needed, and how the data will be used to address the problem being investigated. DQOs also establish numeric limits for the data to allow the data user to determine whether the data collected are of sufficient quality for use in their intended application.

The usability of the data collected during this investigation depends on its quality. A number of factors relate to the quality of data, and sample collection methods are as important to consider as methods used for sample analysis. Following standard operating procedures for both sample collection and analysis reduces sampling and analytical error. Complete chain-of-custody documentation and adherence to required sample preservation techniques, holding times and proper shipment methods ensure sample integrity. Obtaining valid and comparable data also requires adequate QA/QC procedures and documentation, as well as established detection and control limits.

Quantitation limits are based on the extent to which the field equipment, laboratory equipment, or analytical process can provide accurate measurements of consistent quality for specific constituents in field samples. The quantitation limit for a given analysis will vary depending on instrument sensitivity and matrix effects.

1.1.3.2 Precision, Accuracy, Completeness, and Comparability

The effectiveness of a QA program is measured by the quality of data generated by the laboratory. Data quality is judged in terms of its precision, accuracy, completeness, and comparability. These terms are described as follows:

Accuracy

Accuracy is the degree of agreement of a measurement or average of measurements with an accepted reference or "true" value, and is a measure of bias in the system. The accuracy of a measurement system is impacted by the errors introduced through the sampling process, field contamination, preservation, handling, sample matrix, sample preparation, and analytical techniques.

For this project, laboratory accuracy of the measurement data will be assessed and controlled. Results for blanks, matrix spikes, LCS, and surrogates will be the primary indicators of accuracy. These results will be used to control accuracy by requiring that they meet specified criteria. As spiked samples are analyzed, spike recoveries will be calculated and compared to pre-established acceptance limits.

Acceptance limits are based upon previously established laboratory performance for similar samples. In this approach, the control limits reflect the minimum and maximum recoveries expected for individual measurements for an in-control system. Recoveries outside the established limits indicate some assignable cause, other than normal measurement error, and possible need for corrective action. This includes recalibration of the instrument, reanalysis of the QC sample, reanalysis of the samples in the batch, or flagging the data as suspect if the problems cannot be resolved. For contaminated samples, recovery of matrix spikes may depend on sample homogeneity, matrix interference, and dilution requirements for quantification.

Precision

Precision is a measure of agreement among individual measurements of the same property under prescribed similar conditions. When control limits are established for accuracy, it automatically identifies the precision of the method. In the analysis of samples in a preparation batch, if the recoveries of analytes in the LCS are within the control limits, then the precision is also within limits.

Precision is also determined from duplicate sample analysis and MS/MSD analysis. The precision is quantified by the RPD value calculated from the duplicate results.

Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under correct, normal conditions.

Successful analyses are defined as those where the samples arrived at the laboratory intact, properly preserved, in sufficient quantity to perform the requested analyses, and accompanied by a completed chain-of-custody. Furthermore, the sample must be analyzed within the specified holding time and in such a manner that analytical QC criteria described in this document are met.

Factors that adversely affect completeness include:

- Receipt of samples in broken containers;
- Receipt of samples in which chain of custody or sample integrity is compromised in some way;
- Samples received with insufficient volume to perform initial analyses or repeat analyses, if initial efforts do not meet QC acceptance criteria;
- Improperly preserved samples; and
- Samples held in the field or laboratory longer than expected, thereby jeopardizing holding time requirements.

Completeness for the entire project also involves completeness of field and laboratory documentation, whether all samples and analyses specified in the Sampling and Analysis Plan have been processed, and whether the procedures specified in the SAP, Work Plan, and Laboratory Standard Operating Procedures (SOPs) have been implemented.

Comparability

Comparability expresses the confidence with which one data set can be compared to another data set measuring the same property. Comparability is ensured through the use of established and approved sample collection techniques and analytical methods, consistency in the basis of analysis (wet or dry weight, volume, etc.), consistency in reporting units, and analysis of standard reference materials.

1.1.3.3 Specific Measurement DQOs for Evaluating Data DQO Compliance

1. Precision is expressed in RPD values. Spiked (MS/MSD) and unspiked duplicate field samples are analyzed in order to determine precision.
2. Accuracy is expressed as a percentage of the data outside the QC entity's control limits. The percent recoveries from laboratory control sample spikes, matrix spikes and surrogate spikes are used to determine accuracy.

The samples for this data set were examined to determine compliance with the DQOs. The results are listed below.

The following methods analyzed samples for the BOU PAC Well Samples project and resulted in usable data of known precision and accuracy except as listed below. Several analytes had detections below the PQL and are defined as an estimated value. All of these detections are usable data.

Method E314.0 for Perchlorate

No adverse QC issues were detected.

Method 8270C(M) for 1,4-Dioxane

No adverse QC issues were detected.

Method E524M-TCP for 1,2,3-Trichloropropane

No adverse QC issues were detected.

Method 1625CM for low level N-Nitrosodimethylamine
No adverse QC issues were detected.

Method 6010B/7470A for Title 22 Metals

Duplicate sample RPD results outside control limits qualified sample MW-5 and field duplicate MW-55 as estimated for Selenium. Because the RPD was outside control limits there is uncertainty that the two environmental sample detections are accurate. Therefore, the detected results are considered estimated. The estimated data are usable for the intended purpose.

The laboratory analyzed a method blank to determine if laboratory operations introduced contamination into the analytical process. Analyte detections in the method blank indicate laboratory sponsored detections. Similar detections in associated environmental samples are qualified with a "B" qualifier. Because the "B" qualified detections were likely caused by laboratory contamination, the detected numerical results are considered not usable and the result for the sample analyses should be considered "not detected".

Method SW6010B samples MW-3, MW-5, and MW-8 were qualified due to method blank contamination for Arsenic. Method SW6010B sample MW-3 was qualified due to method blank contamination for Antimony All of these detections were artifacts of laboratory contamination and likely not in the environmental samples. The results are usable as "not detected" with MDL values corresponding to the individuals metals MDL values.

Method 218.6 for Hexavalent Chromium
No adverse QC issues were detected.

Method 8260B for Volatile Organic Compounds

Duplicate sample RPD results outside control limits qualified sample MW-5 and field duplicate MW-55 as estimated for Carbon Tetrachloride. Because the RPD was outside control limits there is uncertainty that the two environmental sample detections are accurate. Therefore, the detected results are considered estimated. The estimated data are usable for the intended purpose.

The laboratory analyzed a method blank to determine if laboratory operations introduced contamination into the analytical process. Analyte detections in the method blank indicate laboratory sponsored detections. Similar detections in associated environmental samples are qualified with a "B" qualifier. Because the "B" qualified detections were likely caused by laboratory contamination, the detected numerical results are considered not usable and the result for the sample analyses should be considered "not detected".

Field blanks are analyzed to determine if field operation have introduced contamination into the environmental samples.

Method SW8260B sample MW-5 was qualified due to method blank contamination for Acetone. Method SW8260B sample MW-4 was qualified due to method blank contamination for Toluene. The "B" qualified data values are artifacts of laboratory operations and likely not native to the environmental sample.

Method SW8260B samples MW-3, MW-7, and MW-8 were qualified due to field blank contamination for 1,1,2-Trichlorotrifluoroethane. The "B" qualified data values are artifacts of field operations and likely not native to the environmental sample.

Method 300.0 for Common Inorganic Ions
No adverse QC issues were detected.

Method 376.2 for Sulfide
No adverse QC issues were detected.

Method 360.1 for Dissolved Oxygen
No adverse QC issues were detected.

1.1.3.4 Completeness

The completeness of this data set was above the DQO criterion of 90 percent. The DQO was satisfied.

1.1.3.5 Data Gaps

All data are usable for their intended purpose. No data gaps exist.

1.1.3.6 Holding Times Compliance

All holding times were within method established criteria.

1.1.3.7 Other QC Problems

No other QC problems to report.

Project: BOU				Table 1											
Site: PAC				Analytical Data Summary											
Extraction Method: SW3520B				EPA Method E1625C											
Analytical Method: E1625C															
Matrix: Water															
Units: ug/L															
				Environmental Samples											
				Field ID:			MW-3			MW-7			MW-8		
				SDG:			06-12-0691			06-12-0691			06-12-0691		
				Batch ID:			061213L07			061213L07			061213L07		
Parameters	MDL	██████████	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	
1,4-Dioxane	0.40	██████████	2.0	1.4	J	q	2.0	ND	U	g	2.0	2.5		g	

Project: BOU				Table 1										
Site: PAC				Analytical Data Summary										
Extraction Method: SW3520B				EPA Method E1625C										
Analytical Method: E1625C														
Matrix: Water														
Units: ug/L														
				Environmental Samples										
				Field ID: MW-4			MW-5			MW-55				
				SDG: 06-12-0774			06-12-0774			06-12-0774				
				Batch ID: 061213L07			061213L07			061213L07				
Parameters	MDL		PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
1,4-Dioxane	0.40		2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g

Project: BOU														
Site: PAC														
Extraction Method: SW3520B														
Analytical Method: E1625C														
Matrix: Water														
Units: ng/L														
Table 1														
Analytical Data Summary														
EPA Method E1625C														
Environmental Samples														
			MW-3				MW-4				MW-5			
			SDG: 07-01-0388				07-01-0388				07-01-0388			
			Batch ID: 070108L16				070108L16				070108L16			
Parameters	MDL		PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
N-Nitrosodimethylamine	0.48		2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g

Project: BOU							Table 1							
Site: PAC							Analytical Data Summary							
Extraction Method: SW3520B							EPA Method E1625C							
Analytical Method: E1625C														
Matrix: Water														
Units: ng/L														
							Environmental Samples							
							Field ID: MW-6							
							SDG: 07-01-0388							
							Batch ID: 070108L16							
Parameters	MDL		PQL	Result	Validity	Comments								
N-Nitrosodimethylamine	0.48		2.0	ND	U	g								

Project: BOU				Table 1										
Site: PAC				Analytical Data Summary										
Extraction Method: SW3520B				EPA Method E1625C										
Analytical Method: E1625C														
Matrix: Water														
Units: ng/L														
				Environmental Samples										
				Field ID: MW-7			MW-8			MW-9				
				SDG: 07-01-0477			07-01-0477			07-01-0477				
				Batch ID: 070108L16			070108L16			070108L16				
Parameters	MDL	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
N-Nitrosodimethylamine	0.48	MDL	2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g

Project: BOU		Table 2											
Site: PAC		Analytical Data Summary											
Extraction Method: SW5030B		EPA Method SW8260B											
Analytical Method: SW8260B													
Matrix: Water		Environmental Samples											
Units: ug/L													
		Field ID: MW-3				MW-7				MW-8			
		SDG: 06-12-0691				06-12-0691				06-12-0691			
		Batch ID: 061214L01				061213L01				061214L01			
Parameters	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
Acetone	7.0	50	ND	U	g	50	ND	U	g	50	ND	U	g
Benzene	0.19	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
Bromobenzene	0.26	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromochloromethane	0.88	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromodichloromethane	0.21	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromoform	0.87	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromomethane	3.5	10	ND	U	g	10	ND	U	g	10	ND	U	g
2-Butanone	8.0	10	ND	U	g	10	ND	U	g	10	ND	U	g
n-Butylbenzene	0.25	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
sec-Butylbenzene	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
tert-Butylbenzene	0.19	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Carbon Disulfide	1.8	10	ND	U	g	10	ND	U	g	10	ND	U	g
Carbon Tetrachloride	0.29	0.50	0.87		g	0.50	ND	U	g	0.50	0.64		g
Chlorobenzene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Chloroethane	0.70	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Chloroform	0.29	1.0	1.6		g	1.00	0.92	J	q	1.0	1.1		g
Chloromethane	2.1	10	ND	U	g	10	ND	U	g	10	ND	U	g
2-Chlorotoluene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
4-Chlorotoluene	0.18	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dibromochloromethane	0.39	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dibromo-3-Chloropropane	3.1	5.0	ND	U	g	5.0	ND	U	g	5.0	ND	U	g
1,2-Dibromoethane	0.41	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dibromomethane	0.82	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichlorobenzene	0.15	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3-Dichlorobenzene	0.15	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,4-Dichlorobenzene	0.17	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dichlorodifluoromethane	0.33	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1-Dichloroethane	0.25	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichloroethane	0.25	0.50	ND	U	g	0.50	ND	U	g	0.5	1.9		g
1,1-Dichloroethene	0.26	1.0	7.0		g	1.00	0.84	J	q	1.0	1.1		g
c-1,2-Dichloroethene	0.63	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
t-1,2-Dichloroethene	0.83	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichloropropane	0.55	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3-Dichloropropane	0.28	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
2,2-Dichloropropane	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1-Dichloropropene	0.62	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
c-1,3-Dichloropropene	0.28	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
t-1,3-Dichloropropene	0.26	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
Ethylbenzene	0.13	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
2-Hexanone	3.4	10	ND	U	g	10	ND	U	g	10	ND	U	g
Isopropylbenzene	0.10	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
p-Isopropyltoluene	0.14	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Methylene Chloride	9.7	10	ND	U	g	10	ND	U	g	10	ND	U	g
4-Methyl-2-Pentanone	2.0	10	ND	U	g	10	ND	U	g	10	ND	U	g
Naphthalene	0.42	10	ND	U	g	10	ND	U	g	10	ND	U	g
n-Propylbenzene	0.12	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Styrene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g

Table 2													
Analytical Data Summary													
EPA Method SW8260B													
Project: BOU													
Site: PAC													
Extraction Method: SW5030B													
Analytical Method: SW8260B													
Matrix: Water													
Units: ug/L													
Environmental Samples													
Field ID: MW-3 MW-7 MW-8													
SDG: 06-12-0691 06-12-0691 06-12-0691													
Batch ID: 061214L01 061213L01 061214L01													
Parameters	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
1,1,1,2-Tetrachloroethane	0.44	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2,2-Tetrachloroethane	0.45	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Tetrachloroethene	0.30	1	87		g	1	22		g	1	140		g
Toluene	0.23	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2,3-Trichlorobenzene	0.26	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2,4-Trichlorobenzene	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,1-Trichloroethane	0.35	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2-Trichloroethane	0.79	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Trichloroethene	0.31	1	27		g	1.0	8.8		g	1	54		g
Trichlorofluoromethane	0.83	10	ND	U	g	10	ND	U	g	10	ND	U	g
1,2,3-Trichloropropane	2.8	5.0	ND	U	g	5.0	ND	U	g	5.0	ND	U	g
1,2,4-Trimethylbenzene	0.13	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3,5-Trimethylbenzene	0.86	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Vinyl Acetate	6.4	10	ND	U	g	10	ND	U	g	10	ND	U	g
Vinyl Chloride	0.24	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
p/m-Xylene	0.27	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
o-Xylene	0.17	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Methyl-t-Butyl Ether (MTBE)	0.23	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.61	10.0	2.7	B J	k, q	10.0	1.6	B J	k, q	10.0	2.0	B J	k, q

Table 2													
Analytical Data Summary													
EPA Method SW8260B													
Project: BOU													
Site: PAC													
Extraction Method: SW5030B													
Analytical Method: SW8260B													
Matrix: Water													
Units: ug/L													
Environmental Samples													
Field ID: MW-4 MW-5 MW-55													
SDG: 06-12-0774 06-12-0774 06-12-0774													
Batch ID: 061213L01 061213L01 061214L01													
Parameters	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
Acetone	7.0	50	ND	U	g	50.0	9.3	B J	a, q	50.0	9.2	J	q
Benzene	0.19	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
Bromobenzene	0.26	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromochloromethane	0.88	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromodichloromethane	0.21	1.0	ND	U	g	1.00	0.50	J	q	1.0	ND	U	g
Bromoform	0.87	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Bromomethane	3.5	10	ND	U	g	10	ND	U	g	10	ND	U	g
2-Butanone	8.0	10	ND	U	g	10	ND	U	g	10	ND	U	g
n-Butylbenzene	0.25	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
sec-Butylbenzene	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
tert-Butylbenzene	0.19	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Carbon Disulfide	1.8	10	ND	U	g	10	ND	U	g	10	ND	U	g
Carbon Tetrachloride	0.29	0.50	0.45	J	q	0.5	2.7	J	f	0.5	1.9	J	f
Chlorobenzene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Chloroethane	0.70	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Chloroform	0.29	1.0	1.1	g	1.0	2.5	g	1.0	1.9	g	1.0	1.9	g
Chloromethane	2.1	10	ND	U	g	10	ND	U	g	10	ND	U	g
2-Chlorotoluene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
4-Chlorotoluene	0.18	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dibromochloromethane	0.39	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dibromo-3-Chloropropane	3.1	5.0	ND	U	g	5.0	ND	U	g	5.0	ND	U	g
1,2-Dibromoethane	0.41	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dibromomethane	0.82	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichlorobenzene	0.15	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3-Dichlorobenzene	0.15	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,4-Dichlorobenzene	0.17	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Dichlorodifluoromethane	0.33	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1-Dichloroethane	0.25	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichloroethane	0.25	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
1,1-Dichloroethene	0.26	1.0	1.3	g	1.0	6.0	g	1.0	4.6	g	1.0	4.6	g
c-1,2-Dichloroethene	0.63	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
t-1,2-Dichloroethene	0.83	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2-Dichloropropane	0.55	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3-Dichloropropane	0.28	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
2,2-Dichloropropane	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1-Dichloropropene	0.62	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
c-1,3-Dichloropropene	0.28	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
t-1,3-Dichloropropene	0.26	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
Ethylbenzene	0.13	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
2-Hexanone	3.4	10	ND	U	g	10	ND	U	g	10	ND	U	g
Isopropylbenzene	0.10	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
p-Isopropyltoluene	0.14	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Methylene Chloride	9.7	10	ND	U	g	10	ND	U	g	10	ND	U	g
4-Methyl-2-Pentanone	2.0	10	ND	U	g	10	ND	U	g	10	ND	U	g
Naphthalene	0.42	10	ND	U	g	10	ND	U	g	10	ND	U	g
n-Propylbenzene	0.12	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Styrene	0.16	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g

Project: BOU		Table 2											
Site: PAC		Analytical Data Summary											
Extraction Method: SW5030B		EPA Method SW8260B											
Analytical Method: SW8260B													
Matrix: Water		Environmental Samples											
Units: ug/L													
		MW-4				MW-5				MW-55			
		SDG: 06-12-0774				06-12-0774				06-12-0774			
		Batch ID: 061213L01				061213L01				061214L01			
Parameters	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
1,1,1,2-Tetrachloroethane	0.44	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2,2-Tetrachloroethane	0.45	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Tetrachloroethene	0.30	1	25		g	1	91		g	1	110		g
Toluene	0.23	1.00	0.23	B J	a, k, q	1.0	ND	U	g	1.0	ND	U	g
1,2,3-Trichlorobenzene	0.26	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,2,4-Trichlorobenzene	0.29	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,1-Trichloroethane	0.35	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2-Trichloroethane	0.79	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Trichloroethene	0.31	1	11		g	1	69		g	1	57		g
Trichlorofluoromethane	0.83	10	ND	U	g	10	ND	U	g	10	ND	U	g
1,2,3-Trichloropropane	2.8	5.0	ND	U	g	5.0	ND	U	g	5.0	ND	U	g
1,2,4-Trimethylbenzene	0.13	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,3,5-Trimethylbenzene	0.86	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Vinyl Acetate	6.4	10	ND	U	g	10	ND	U	g	10	ND	U	g
Vinyl Chloride	0.24	0.50	ND	U	g	0.50	ND	U	g	0.50	ND	U	g
p/m-Xylene	0.27	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
o-Xylene	0.17	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
Methyl-t-Butyl Ether (MTBE)	0.23	1.0	ND	U	g	1.0	ND	U	g	1.0	ND	U	g
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.61	10.0	1.3	J	q	10.0	2.8	J	q	10.0	1.8	J	q

Project: BOU		Table 2				
Site: PAC		Analytical Data Summary				
Extraction Method: SW5030B		EPA Method SW8260B				
Analytical Method: SW8260B						
Matrix: Water		Environmental Samples				
Units: ug/L						
		Field ID:	MW-6			
		SDG:	06-12-0774			
		Batch ID:	061213L01			
Parameters	MDL	PQL	Result	Validity	Comments	
Acetone	7.0	50	ND	U	g	
Benzene	0.19	0.50	ND	U	g	
Bromobenzene	0.26	1.0	ND	U	g	
Bromochloromethane	0.88	1.0	ND	U	g	
Bromodichloromethane	0.21	1.00	0.30	J	q	
Bromoform	0.87	1.0	ND	U	g	
Bromomethane	3.5	10	ND	U	g	
2-Butanone	8.0	10	ND	U	g	
n-Butylbenzene	0.25	1.0	ND	U	g	
sec-Butylbenzene	0.29	1.0	ND	U	g	
tert-Butylbenzene	0.19	1.0	ND	U	g	
Carbon Disulfide	1.8	10	ND	U	g	
Carbon Tetrachloride	0.29	0.5	2.9		g	
Chlorobenzene	0.16	1.0	ND	U	g	
Chloroethane	0.70	1.0	ND	U	g	
Chloroform	0.29	1.0	2.6		g	
Chloromethane	2.1	10	ND	U	g	
2-Chlorotoluene	0.16	1.0	ND	U	g	
4-Chlorotoluene	0.18	1.0	ND	U	g	
Dibromochloromethane	0.39	1.0	ND	U	g	
1,2-Dibromo-3-Chloropropane	3.1	5.0	ND	U	g	
1,2-Dibromoethane	0.41	1.0	ND	U	g	
Dibromomethane	0.82	1.0	ND	U	g	
1,2-Dichlorobenzene	0.15	1.0	ND	U	g	
1,3-Dichlorobenzene	0.15	1.0	ND	U	g	
1,4-Dichlorobenzene	0.17	1.0	ND	U	g	
Dichlorodifluoromethane	0.33	1.0	ND	U	g	
1,1-Dichloroethane	0.25	1.0	ND	U	g	
1,2-Dichloroethane	0.25	0.50	ND	U	g	
1,1-Dichloroethene	0.26	1.0	3.2		g	
c-1,2-Dichloroethene	0.63	1.0	ND	U	g	
t-1,2-Dichloroethene	0.83	1.0	ND	U	g	
1,2-Dichloropropane	0.55	1.0	ND	U	g	
1,3-Dichloropropane	0.28	1.0	ND	U	g	
2,2-Dichloropropane	0.29	1.0	ND	U	g	
1,1-Dichloropropene	0.62	1.0	ND	U	g	
c-1,3-Dichloropropene	0.28	0.50	ND	U	g	
t-1,3-Dichloropropene	0.26	0.50	ND	U	g	
Ethylbenzene	0.13	1.0	ND	U	g	
2-Hexanone	3.4	10	ND	U	g	
Isopropylbenzene	0.10	1.0	ND	U	g	
p-Isopropyltoluene	0.14	1.0	ND	U	g	
Methylene Chloride	9.7	10	ND	U	g	
4-Methyl-2-Pentanone	2.0	10	ND	U	g	
Naphthalene	0.42	10	ND	U	g	
n-Propylbenzene	0.12	1.0	ND	U	g	
Styrene	0.16	1.0	ND	U	g	

Project: BOU				Table 2		
Site: PAC				Analytical Data Summary		
Extraction Method: SW5030B				EPA Method SW8260B		
Analytical Method: SW8260B						
Matrix: Water				Environmental Samples		
Units: ug/L						
				Field ID:	MW-6	
				SDG:	06-12-0774	
				Batch ID:	061213L01	
Parameters	MDL		PQL	Result	Validity	Comments
1,1,1,2-Tetrachloroethane	0.44		1.0	ND	U	g
1,1,2,2-Tetrachloroethane	0.45		1.0	ND	U	g
Tetrachloroethene	0.30		1	80		g
Toluene	0.23		1.0	ND	U	g
1,2,3-Trichlorobenzene	0.26		1.0	ND	U	g
1,2,4-Trichlorobenzene	0.29		1.0	ND	U	g
1,1,1-Trichloroethane	0.35		1.00	0.51	J	q
1,1,2-Trichloroethane	0.79		1.0	ND	U	g
Trichloroethene	0.31		1	57		g
Trichlorofluoromethane	0.83		10	ND	U	g
1,2,3-Trichloropropane	2.8		5.0	ND	U	g
1,2,4-Trimethylbenzene	0.13		1.0	ND	U	g
1,3,5-Trimethylbenzene	0.86		1.0	ND	U	g
Vinyl Acetate	6.4		10	ND	U	g
Vinyl Chloride	0.24		0.50	ND	U	g
p/m-Xylene	0.27		1.0	ND	U	g
o-Xylene	0.17		1.0	ND	U	g
Methyl-t-Butyl Ether (MTBE)	0.23		1.0	ND	U	g
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.61		10.0	2.0	J	q

Project: BOU					Table 3									
Site: PAC					Analytical Data Summary									
Extraction Method: SW7470A					EPA Method SW7470A									
Analytical Method: SW7470A														
Matrix: Water														
Units: mg/L														
Environmental Samples														
		Field ID:				MW-3					MW-7			
		SDG:				06-12-0691					06-12-0691			
Parameters	MDL	██████████	Batch ID	PQL	Result	Validity	Comments	Batch ID	PQL	Result	Validity	Comments		
		██████████			(Filtered)					(Filtered)				
Mercury	0.0000177	██████████	061213L02	0.000500	ND	U	g	061213L02	0.000500	ND	U	g		

Project: BOU					Table 3							
Site: PAC					Analytical Data Summary							
Extraction Method: SW7470A					EPA Method SW7470A							
Analytical Method: SW7470A												
Matrix: Water												
Units: mg/L												
		Environmental Samples										
		Field ID:				MW-8						
		SDG:				06-12-0691						
Parameters	MDL	██████████	Batch ID	PQL		Result (Filtered)	Validity	Comments				
Mercury	0.0000177	██████████	061213L02	0.000500		ND	U	g				

Project: BOU					Table 3							
Site: PAC					Analytical Data Summary							
Extraction Method: SW7470A					EPA Method SW7470A							
Analytical Method: SW7470A												
Matrix: Water												
Units: mg/L												
		Environmental Samples										
		Field ID:			MW-55					MW-6		
		SDG:			06-12-0774					06-12-0774		
Parameters	MDL	SDG	Batch ID	PQL	Result	Validity	Comments	Batch ID	PQL	Result	Validity	Comments
					(Filtered)					(Filtered)		
Mercury	0.0000177	SDG	061213L04	0.000500	ND	U	g	061213L04	0.000500	ND	U	g

Project: BOU				Table 4		
Site: PAC				Analytical Data Summary		
Extraction Method: SW3005A				EPA Method SW6010B		
Analytical Method: SW6010B						
Matrix: Water						
Units: mg/L						
Environmental Samples						
Field ID: MW-6						
SDG: 06-12-0774						
Batch ID: 061213L07F						
Parameters	MDL	PQL	Result (Filtered)	Validity	Comments	
Antimony	0.00209	0.0150	ND	U	g	
Arsenic	0.00308	0.0100	ND	U	g	
Barium	0.000719	0.010	0.141		g	
Beryllium	0.000176	0.001000	0.000177	J	q	
Cadmium	0.000350	0.00500	ND	U	g	
Calcium	0.00932	0.100	105		g	
Chromium, Total	0.000350	0.00500	0.00398	J	q	
Cobalt	0.000696	0.00500	ND	U	g	
Copper	0.00134	0.00500	ND	U	g	
Lead	0.00236	0.0100	0.0111		g	
Magnesium	0.00328	0.1	30.3		g	
Molybdenum	0.000800	0.00500	0.00689		g	
Nickel	0.00137	0.00500	ND	U	g	
Potassium	0.0561	0.50	5.47		g	
Selenium	0.00295	0.0150	0.0178		g	
Silver	0.000400	0.00500	ND	U	g	
Sodium	0.0192	0.5	37.1		g	
Thallium	0.00233	0.0150	0.0128	J	q	
Vanadium	0.000314	0.00500	0.00376	J	q	
Zinc	0.000848	0.0100	0.0121		g	

Project: BOU												
Site: PAC												
Extraction Method: See Below												
Analytical Method: See Below												
Matrix: Water												
Units: mg/L												
Environmental Samples												
Field ID: MW-3 MW-7												
SDG: 06-12-0691 06-12-0691												
Parameters	EPA Method	MDL	Batch ID	PQL	Result	Validity	Comments	Batch ID	PQL	Result	Validity	Comments
Chloride	E300.0	0.055	061211L01	10	41 *		g	061211L01	10	45 *		g
Nitrite as N	E300.0	0.015	061211L01	0.10	ND	U	g	061211L01	0.10	ND	U	g
Nitrate as N	E300.0	0.028	061211L01	1	12 *		g	061211L01	1	10 *		g
Sulfate	E300.0	0.069	061211L01	10	78 *		g	061211L01	10	79 *		g
Dissolved Oxygen	E360.1	0.0100	61211DOD1	0.01	7.82		g	61211DOD1	0.01	7.45		g
Sulfide	E376.2	0.042	61213SB1	0.050	ND	U	g	61213SB1	0.050	ND	U	g
* Sample diluted at a factor of 10												

Project: BOU					Table 5							
Site: PAC					Analytical Data Summary							
Extraction Method: See Below					California Title 22 General Minerals							
Analytical Method: See Below												
Matrix: Water												
Units: mg/L												
					Environmental Samples							
					Field ID:				MW-4			
					SDG:				MW-5			
					06-12-0774				06-12-0774			
Parameters	EPA Method	MDL	Batch ID	PQL	Result	Validity	Comments	Batch ID	PQL	Result	Validity	Comments
Chloride	E300.0	0.055	061212L01	5	46 *		g	061212L01	5	39 *		g
Nitrite as N	E300.0	0.015	061212L01	0.10	ND	U	g	061212L01	0.10	ND	U	g
Nitrate as N	E300.0	0.028	061212L01	0.50	11 *		g	061212L01	0.50	12 *		g
Sulfate	E300.0	0.069	061212L01	10	80 **		g	061212L01	10	76 **		g
Dissolved Oxygen	E360.1	0.0100	61212DOD1	0.01	7.35		g	61212DOD1	0.01	7.02		g
Sulfide	E376.2	0.042	61213SB1	0.050	ND	U	g	61213SB1	0.050	ND	U	g
* Sample diluted at a factor of 5												
** Sample diluted at a factor of 10												

Project: BOU						Table 5								
Site: PAC						Analytical Data Summary								
Extraction Method: See Below						California Title 22 General Minerals								
Analytical Method: See Below														
Matrix: Water														
Units: mg/L														
						Environmental Samples								
						Field ID: SDG:			MW-55 06-12-0774			MW-6 06-12-0774		
Parameters	EPA Method	MDL	██████████	Batch ID	PQL	Result	Validity	Comments	Batch ID	PQL	Result	Validity	Comments	
Chloride	E300.0	0.055	██████████	061212L01	5	38 *		g	061212L01	5	42 *		g	
Nitrite as N	E300.0	0.015	██████████	061212L01	0.10	ND	U	g	061212L01	0.10	ND	U	g	
Nitrate as N	E300.0	0.028	██████████	061212L01	0.50	12 *		g	061212L01	0.50	11 *		g	
Sulfate	E300.0	0.069	██████████	061212L01	10	78 **		g	061212L01	10	78 **		g	
Dissolved Oxygen	E360.1	0.0100	██████████	61212DOD1	0.01	6.76		g	61212DOD1	0.01	7.05		g	
Sulfide	E376.2	0.042	██████████	61213SB1	0.050	ND	U	g	61213SB1	0.050	ND	U	g	
* Sample diluted at a factor of 5														
** Sample diluted at a factor of 10														

Project: BOU													Table 6																			
Site: PAC													Analytical Data Summary																			
Extraction Method: SW5030B													EPA Method E524.2 1,2,3-Trichloropropane																			
Analytical Method: E524.2 1,2,3-Trichloropropane																																
Matrix: Water																																
Units: ug/L													Environmental Samples																			
													Field ID:		MW-3		MW-7		MW-8													
													SDG:		06-12-0691		06-12-0691		06-12-0691													
													Batch ID:		061212L01		061212L01		061212L01													
Parameters													MDL		PQL		Result		Validity		Comments		PQL		Result		Validity		Comments			
															Dilution 5										Dilution 5							
1,2,3-Trichloropropane													0.0017		0.02		0.15		g		0.005		0.013		g		0.02		0.11		g	

Project: BOU													Table 6			
Site: PAC													Analytical Data Summary			
Extraction Method: SW5030B													EPA Method E524.2 1,2,3-Trichloropropane			
Analytical Method: E524.2 1,2,3-Trichloropropane																
Matrix: Water																
Units: ug/L													Environmental Samples			
Field ID: MW-4													MW-5		MW-55	
SDG: 06-12-0774													06-12-0774		06-12-0774	
Batch ID: 061214L01													061214L01		061214L01	
Parameters	MDL	=====	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments		
								Dilution 2				Dilution 5				
1,2,3-Trichloropropane	0.0017	=====	0.005	0.020		g	0.01	0.18		g	0.02	0.19		g		

Project: BOU													Table 7					
Site: PAC													Analytical Data Summary					
Extraction Method: None													EPA Method E314.0					
Analytical Method: E314.0																		
Matrix: Water																		
Units: ug/L																		
Environmental Samples																		
Field ID:													MW-3		MW-7		MW-8	
SDG:													06-12-0691		06-12-0691		06-12-0691	
Batch ID:													061212L02		061212L02		061212L02	
Parameters	MDL		PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments				
Perchlorate	0.43		2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g				

Project: BOU			Table 7											
Site: PAC			Analytical Data Summary											
Extraction Method: None			EPA Method E314.0											
Analytical Method: E314.0														
Matrix: Water														
Units: ug/L			Environmental Samples											
			Field ID: MW-3			MW-4			MW-5					
			SDG: 07-01-0388			07-01-0388			07-01-0388					
			Batch ID: 070108L01			070108L01			070108L01					
Parameters	MDL		PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
Perchlorate	0.43		2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g

Project: BOU				Table 7																	
Site: PAC				Analytical Data Summary																	
Extraction Method: None				EPA Method E314.0																	
Analytical Method: E314.0																					
Matrix: Water																					
Units: ug/L				Environmental Samples																	
			Field ID:	MW-6																	
			SDG:	07-01-0388																	
			Batch ID:	070108L01																	
Parameters	MDL		PQL	Result	Validity	Comments															
Perchlorate	0.43		2.0	ND	U	g															

Project: BOU					Table 7											
Site: PAC					Analytical Data Summary											
Extraction Method: None					EPA Method E314.0											
Analytical Method: E314.0																
Matrix: Water																
Units: ug/L					Environmental Samples											
					Field ID:			MW-7			MW-8			MW-9		
					SDG:			07-01-0477			07-01-0477			07-01-0477		
					Batch ID:			070110L01			070110L01			070110L01		
Parameters	MDL		PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments		
Perchlorate	0.43		2.0	ND	U	g	2.0	ND	U	g	2.0	ND	U	g		

Project: BOU													Table 8			
Site: PAC													Analytical Data Summary			
Extraction Method: None													EPA Method E218.6			
Analytical Method: E218.6																
Matrix: Water																
Units: ug/L																
Environmental Samples																
Field ID: MW-3													MW-4		MW-5	
SDG: 07-01-0388													07-01-0388		07-01-0388	
Batch ID: 070108L02													070108L02		070108L02	
Parameters	MDL	=====	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments		
Chromium, Hexavalent	0.0050	=====	0.20	1.8		g	0.20	1.6		g	0.20	1.9		g		

Table 8													
Analytical Data Summary													
EPA Method E218.6													
Environmental Samples													
Field ID: MW-7 MW-8 MW-9													
SDG: 07-01-0477 07-01-0477 07-01-0477													
Batch ID: 070109L01 070109L01 070109L01													
Parameters	MDL	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments	PQL	Result	Validity	Comments
Chromium, Hexavalent	0.0050	0.20	1.6		g	0.20	1.6		g	0.20	1.7		g